



Institutions and the World of Work in Jordan





Enhancing Institutionalized Partnerships between TVET

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This report, a UNESCO initiative, examines partnerships between Technical and Vocational Education and Training (TVET) Institutions and the World of Work in Jordan. The information collected and research conducted follows the methodology and guidelines of UNESCO for the national reports on enhancing institutionalized partnerships between TVET institutions and the world of work in the Arab region. This report aims to support partners in the design and implementation of relevant Technical and Vocational Education and Training (TVET) policies that can contribute to employment.

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Foreword

In line with its TVET Strategy, UNESCO promotes TVET as an integral part of education. The Organization strives to support the efforts of Member States to enhance the relevance of their TVET systems and equip youth and adults with skills required for employment, decent work, entrepreneurship, and lifelong learning.

In the Arab region, TVET's landscape is changing fast in response to social, political and economic factors, demographic developments and labour market trends driven by technological and work processes developments. To provide access to quality TVET, member States must define and strengthen regulatory frameworks for TVET to define roles, rights, obligations, and accountability of public and private actors, encourage stakeholders' participation, and foster partnerships. Effective governance models for TVET involve relevant local stakeholders and business associations and in particular, close partnership between TVET institutions and the world of work - public-private partnerships (PPP).

The adoption of PPP within the TVET sector in Arab countries has received varying levels of attention and prioritization. In some cases, PPP are embraced nationally, and in other cases, they are ad hoc, scatter-gun and dealt with at the municipal level. It is however increasingly clear, the private sector (PS) has demonstrated a keen interest in this modality and that some countries are having more success at harnessing PS dynamism, commercial know-how, and resources to their advantage than others. There is a need to understand:

- How PPP in TVET can better serve the national interests of Arab countries; and
- Which models best result in quality, affordable, inclusive and sustainable training.

This study on Jordan is part of a series investigating PPP in three countries: Egypt, Jordan and Palestine. The study had the aim to support Jordan TVET stakeholders to explore practical options to strengthen and improve public private partnerships between TVET institutions and the private sector in Jordan.

A new kind of industrial revolution is happening all over the world and Jordan is becoming a middleincome country. TVET needs to support the country's medium and longterm targets for human capital development, crucial for achieving not only the Sustainable Development Goals (SDGs) but also economic growth. As both have common interests, it makes sense that the public and private sectors partner together to modernize the technical institutions and develop a skilled workforce.

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Abbreviations

AHUC	Al Huson University College
AQACHEI	Accreditation and Quality Assurance Commission for Higher Education Institutions
ASCO	Arab Standard Classification of Occupations
CAQA	Center of Accreditation and Quality Assurance
CC	Community college
CCC	Consolidated Contractors Company
CDC	Career Development Center
CSB	Civil Service Bureau
DOS	Department of Statistics
EBRD	European Bank for Reconstruction and Development
ETVET	Employment and Technical and Vocational Education and Training
EU	European Union
GDP	Gross domestic product
GFJTU	General Federation of Jordanian Trade Unions
GIZ	German Agency for International Development
HTU	Al Hussein Technical University
ICT	Information and Communication Technology
ILO	International Labour Organization
IMF	International Monetary Fund
INTAJ	Information and Communications Technology Association of Jordan
IYF	International youth
JAPM	The Jordanian Association of Pharmaceutical Manufacturers
JCA	Jordan Computer Society
JCC	Jordan Chamber of Commerce
JCI	Jordan Chamber of Industry
JEA	Jordan Engineers Association
JICA	Japan International Cooperation Agency
JIEC	Jordan Industrial Estates Company
LMIS	Labour market information system
MOF	Ministry of Finance
MOHESR	Ministry of Higher Education and Scientific Research
MOL	Ministry of Labour

MOPIC	Ministry of Planning and International Cooperation
MSCoE	Model Skill Center of Excellence
NCHRD	National Center for Human Resources Development
NEES	National Electronic Employment System
NES	National employment strategy
NET	National Company for Employment and Training
NGOs	None governmental organizations
NQF	National qualifications framework
NTEP	National Training and Employment Project
OECD	Organisation for Economic Co-operation and Development
PPP	Public–private partnership
SABEQ	Jordan Development Programme
SDC	Skills Development Corporation
SIDA	Swedish International Development Cooperation Agency
SMEs	Small and medium enterprises
SSC	Sector skills council
TVET	Technical and vocational education and training
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
USAID	United States Agency for International Development
VTC	Vocational Training Corporation
WFD	Workforce development

Introduction

Countries worldwide are looking to develop effective partnerships between the public and private (PPP) sectors in different service and development sectors, such as health, transportation and education. In TVET, PPP aims mainly at aligning training programmes according to the actual needs of the labour market through involving the private sector in identifying their needs, planning and implementing training programmes, in addition to contribution of the private sector in bearing the high costs of training. Countries, such as Germany, USA, the Netherlands, Singapore and Malaysia, developed and implemented initiatives for developing workforce skills, based on strong collaboration and partnership between the public and private sectors.

Jordan, as most other developing countries with limited resources, is suffering from high unemployment, particularly among youth of ages between 15 to 29 years (29.5% in 2017) in addition to the mismatch between the outputs of education and the TVET system and the needs of the labour market. Policy makers in Jordan consider TVET an important tool for reducing unemployment if it is developed to meet the actual needs of the labour market. Therefore, national strategies related to workforce training and employment, recently developed the HRD strategy (2016-2025), in particular, to emphasize the role and partnership of the private sector in different aspects and levels of the TVET system, including governance, planning, funding and implementation.

This report focuses mainly on: common concepts of PPP, as identified in the reviewed literature covering the definition of PPP, PPP frameworks and models, examples from selected countries and core attributes (governance, funding and practice), comparison of PPP success stories across some countries, PPP initiatives in Jordan, circumstances and environment related to TVET, PPP implementation in Jordan and conclusions and recommendations for promoting PPP in TVET in Jordan.

Definitions of PPP

Public-private partnership (PPP) in general, is a government service or private business venture, which is funded and operated through a partnership of the government and one or more private sector company.

There are different definitions for PPPs adopted by different countries and institutions. For instance, the OECD defined PPPs as "an arrangement between the government and one or more private partners (which may include the operators and the financers) according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners" OECD 2008).

Within this relationship, PPPs enable the government to initiate a project that has public sector defined goals and well-stated performance indicators to be monitored accordingly, whereas the private sector funds and operates the project based on a set of contractual agreements. In addition to its help in making the most of scarce public funding and of introducing private sector technology and innovation to provide better-quality public services through improved operational efficiency, PPPs also allow for a better allocation of risk between public and private entities.

PPPs are involved in a wide range of social and economic infrastructure projects, but they are mainly used to build and operate roads, bridges and tunnels, light rail networks, airports, air traffic control systems, and water and sanitation plants.

Main schemes and modalities used in PPPs projects are: 1- Build-own-operate (BOO), where the private counterpart builds, owns and operates an asset with no obligation to transfer ownership to the public sector. 2- Buy-build-operate (BBO), where the private counterpart buys an existing asset from the public sector, renovates, modernizes, and/or expands it, and then operates the asset, again with no obligation to transfer ownership back to the public sector. 3- Build-operate-transfer (BOT), where the private counterpart builds an asset, operates it, and then transfers it to the public sector when the operating contract is done (Zahid Jamal).

In **TVET**, PPPs are important for the development of a high quality vocational education and training, because they foster regular communication between employers and TVET providers. Such communication is critical in TVET practice because on one hand, it enables TVET providers to learn more about the skills demanded by the employers, and on the other hand, it allows the employers to have an input in the curricula of TVET, in addition, it gives them a recruiting tool to employ skilled workers.

As the influential Third International Congress on TVET in Shanghai, May 2012 concluded, "scaling up existing models of TVET provision to include more young people and adults is not the solution" to the challenges facing skills development, but rather "it also involves a paradigm shift that includes the active involvement of relevant stakeholders such as industry" (Dunbar, 2013).

PPPs in TVET can be identified as "a formal relationship with shared responsibilities between public and private sector actors in co-operation to achieve mutual goals that may take the form of a joint business venture, a joint education and training agreement, or a social partnership structured around a social agenda" (Kruss 2017).

A TVET system's success in skills development is increasingly linked to the capacity of partnership with external stakeholders such as governmental departments, industries, employer associations, occupational bodies, and civil society (Lucci, 2012).

According to UNESCO (2013), PPP is perceived as a mechanism to shift from a supply-driven to a supplyand demand-driven approach that is needed to address youth unemployment .While supply driven training means producing skilled manpower needed for economic development without referring to the employers' needs. Demand driven is customized to respond directly to specific requirements of employers' needs in the labour market and usually leads to employment or self-employment.

The International Labour Organisation (ILO, 2012a, 2012b) emphasised the leadership role of employers and workers in developing and managing competency standards and monitoring mechanisms in skills development within TVET systems (Kruss 2017).

In addition to the possible contribution in funding TVET, the private sector may be able to provide the following in-kind contributions through partnership setting:

- Jobs skills needs assessment or market assessment, including capacity to train NGOs or other actors to undertake such work
- > Participation on alliance steering committee, secretariat or other intermediary.
- Involvement in curriculum and programme development
- Internships/apprenticeships
- > Exposure of TVET technical staff to new technologies in labour market
- Mentoring/job shadowing/career advice
- > Technology/equipment
- Classroom space/meeting space
- Staff time and expertise
- > Management of public training institutes
- Business connections/networks
- > Competition programme for entrepreneurs, business plans, or innovations
- Loan guarantee for entrepreneurs
- M&E systems or implementation
- Design or implementation of a social marketing campaign (to reach vulnerable/out of-school groups, etc.)

PPP Frameworks and Models

Promoting partnership between TVET providers and the world of work requires availability of a framework that provides a supporting environment for the establishment and enhancement of such partnership. The following elements are critical for developing an integrated framework for promoting PPPs:

- Legislations and regulations not only allow PPPs but enable effective involvement of all related partners in different stages of TVET system from policy planning at national level down to training implementation at the local level in the training institutes/schools/colleges. Countries usually have some national level policies that guide the engagement of employers or other partners in vocational education and training. The well-known example from Germany, "the German Vocational Education Act", regulating the apprenticeship system from 1969, has come to be known as the "dual system".
- Availability of appropriate organization within the TVET system that allows effective partnership at different levels (national, provincial, sectors I and local levels), through having councils, boards and committees with representatives of all related stakeholders.
- > Diversified funding resources for the TVET system, required to cover different costs and expenses necessary for applying PPPs as well as developing the quality of training.
- Stakeholders awareness of the importance of PPPs, with the required Interactive abilities for establishing links with other partners. Such abilities are particularly most required at the local levels by training institutes/schools/colleges and industries/workplaces.

Different models of PPPs can be observed in the TVET sector (Dunbar 2013):

Global Inter-Sector Partnering (ISP) in skills development

In this model a multinational company cooperates through its "factory or branch in the country with the donors, international NGOs or governmental entities" to implement training projects for skills development. Involvement of multinational companies may be for (commercial reasons) providing skilled labour for their factories; Improving the quality and efficiency of their value chains, as a result of their corporate social responsibility policy, or as part of their public relations efforts. Multi-national companies usually provide expertise, funding and equipment for skills development.

Examples of multinational companies involved in such a PPP model include: Nike, Gap. Nokia, Cisco, Scania and Volvo. While for the donors/international NGOs, include the World Bank, USAID, IYF. SIDA and UNDP.

Partnering on national strategies in Skills Development

National and local businesses play a role in strategy development, governance and design of the skills development system within this PPPs model, in addition to their role in providing expertise, funding and equipment for skills development.

As indicated by some studies, employer involvement was stimulated by the introduction of national qualifications frameworks, based on occupational standards and competence-based curricula, and the creation of sector skills councils. In her study "The implementation and impact of National Qualifications Frameworks: Report of a study in 16 countries", Stephanie Allais concluded that in every country studied, where frameworks were perceived as a way of

effective employers involvement in qualifications design, this ensured that qualifications are of the right standards.

However, the study indicated on the other hand that engagement of employers in some countries was problematic, where employers were being described as 'passive' or unwilling to be involved, lacking expertise and knowledge in the specific fields and unable to identify the skills and knowledge they require.

Success of this type of partnership requires good business environments, willingness of employers to cooperate and for the public sector to take part in its traditional role in leading TVET policy. In addition, involvement of the employers in such a partnership model is mainly with large firms.

> Partnering for implementation of Skills Development

Engagement of employers in this model, is at the local level, that is implementing skill development programmes. This may include engagement of the governmental institutions' contribution towards the development of the training programmes and learning materials, offering on-the-job training and work experience for students, providing access to specialized equipment, opportunities for instructor training and up skilling, collaborating on the provision of vocational guidance, information, and quality, assuring the teaching and assessment of learners in training institutes.

Compared with the previous model, these types of PPP activities may involve large and small employers from both, the formal and informal sectors to be taken up according to each one's capacity. They depend more on the enthusiasm and skills of the employers and TVET institution management to collaborate, rather than on the political will and the state of the economy. In addition, the results of these types of collaborations are more likely to flourish in a short to medium-term; therefore, the benefits to all parties are more easily identified.

This model of PPPs allows direct communication and cooperation between companies/work places and training institutes/colleges. It can be established even with weak partnership at the national policy level as long as training institutes/colleges management is decenterlised to some extent, and both of the training institutes and employers are able to collaborate effectively.

Informal Apprenticeships partnership

Informal apprenticeship refers to the system by which a young learner (the apprentice) acquires the skills for a trade or craft in a micro or small enterprise learning and working side by side with an experienced craftsperson. Apprentice and master craftsperson conclude a training agreement that is embedded in local norms and traditions of a society. Costs of training are normally shared between apprentice and master craftsperson (Ryan, 2015).

In low-income countries, a relatively high percentage of youth undertake traditional/informal apprenticeship. This is mainly due to flexibility of apprenticeships in combining work and learning, their affordability and self-financing, their connection with future employment and their generally lower entry standards make them attractive as a source of skills to disadvantaged youth.

However, the quality of informal apprenticeships does not always produce workers with the level of skill required by employers in the formal sector and apprentices have no official recognition for their acquired skills.

Partnership in the informal apprenticeship aims mainly at organizing/improving the traditional apprenticeship to get recognition by both public and private sectors through providing complementary training in cooperation with TVET providers and/or conducting assessments at the end of the apprenticeship-training period.

Stakeholders involved in such partnership may include related governmental institutions, TVET providers, business associations, trades unions and parents. In some cases, international organizations provide support to projects/initiatives for improving the informal apprenticeship.

Involving private sector training providers

Meeting the increased needs of individuals for the vocational skills caused many countries to encourage private sector training providers. However, as the main concern of the private sector is making profit, questions may arise about quality and sustainability of the training. Private sector providers are usually engaged in providing training programmes, which require relatively low investment cost like hairdressing and electronics. Private sector training provider involvement in highly capital-intensive training programmes such as welding and machining are expanded particularly when external financial support resources for TVET providers are available.

Partnership with private sector training providers, through financial subsidy provided by the government or supporting money from a donor, can lack sustainability; they risk cessation of training when the subsidy/donor money is no longer available. Also, partnership here through the official accreditation of TVET programmes delivered by the private providers will ensure that training quality is in line with approved/national occupational standards. Private training providers could achieve better results if they have good links/partnership with employers, who provide internship placements as well as "promises to hire.

Examples of PPP

The following examples show the involvement of the private sector in TVET in three Asian countries of different economic situations. Each example indicates the types of partnership and different stakeholders included in the TVET related aspects, such as governance/management, funding, accrediting and implementing of the training.

Example 1 Public-Private Partnership Governance and Management Reform in India

The National Skill Development Corporation (NSDC) is a not-for-profit organization established in 2009 that has the mandate to fund skill-training initiatives by providing viability gap funding to private skill development institutes. It controls the National Skill Development Fund, created with funds sourced from donors, private entities, central and state governments, statutory bodies, and financial institutions, and offers soft loans with a repayment moratorium to private skill development institutes at interest rates of 6%–7%.

It provides flexible funding modes—loan, equity, and grant—after receipt of proposals to set up skill institutes. The Asian Development Bank also provides funds and technical assistance to the skill institutes. In addition to providing financial assistance for private skill initiatives, NSDC plans to set up sector skills councils, which will be autonomous bodies registered as Section 25 companies or public companies. Sector skills councils will initially be funded by the government and seek to ensure partnership among different stakeholders to develop skill training capacity for a specific sector. They are employer-led organizations that support and guide initiatives to develop sector-specific skills.

NSDC also plans to set up a labour market information system-an online system that provides qualitative and quantitative information on the labour market. NSDC has flexible criteria for submitting skilling proposals to encourage competition between innovative business models. It uses robust evaluation criteria for such proposals and encourages leverage of existing public and private infrastructure. The main sources of revenue are interest income and dividends. The Prime Minister's Skill Council works with NSDC to meet skilling objectives by coordinating skill initiatives and identifying core strategies for skill development.

Source: Athena Infonomics India. 2013. Skill Development in India http://www.athenainfonomics.in/assets/Skill%20Development%20in%20India.pdf /in ADB, 2017

Example 2 Private Sector Accreditation of Private Providers in Sri Lanka

The Accredited Training Providers' Association (ATPA) was formed in 2007 under the Companies Act, and has more than 50 members out of a total of more than 1,100 registered private providers, enrolling about 2,500 trainees. ATPA membership requires accreditation by the Tertiary and Vocational Education Commission (TVEC) to offer courses under the national vocational qualifications framework (NVQF). ATPA's purpose, besides representation of common interests to the government, is to help members raise the standards and quality of technical and vocational education and training. The membership falls into two broad categories, as does private provision as a whole: private business operations and community benefit organizations (e.g., nongovernment organizations). The different goals of the two categories dictate course offerings. Private businesses predominantly offer programmes in hairdressing and beauty culture, textiles and garments, and information technology.

Community-benefit trainers deliver a broader range of programmes at NVQF levels 2–4, including trade training in air-conditioning and refrigeration, auto mechanics, carpentry, house wiring, plumbing, and welding. ATPA also intends to establish, maintain, and administer a fund to support the training institutions. The association is sustained through external support, TVEC subsidy, and member fees. TVEC has disbursed SLRs2.7 million to 16 private institutions to enable them to deliver 28 NVQF courses, particularly in construction, automotive, electricity, and electronics. ATPA advocates that benefits enjoyed by government training institutions should be extended to its membership, including concessions on student transport and electricity rates and exemption from value-added tax.

Sources: P. Brady and R. Perera. TVET Sri Lanka Addressing the Knowledge Age. Draft report. v1.2, January. Unpublished. Colombo. (TA 7746-SRI). p. 43; and interview with the vice president of Accredited Training Providers' Association ATPA, October 2011/in ADB, 2017.

Example 3 Skills Development Levy System in Singapore

The objectives of the Singapore Skills Development Fund (SDF) go beyond training to influence a company's choice of technology. This levy formed part of a broader government industrial strategy to restructure the economy toward a more capital-intensive system of production. In 2007, the SDF received S\$108 million (\$88.4 million) from the levy and, in 2008, \$99 million. What makes the Singapore system unique is that the levy is imposed only on lower-wage workers earning \$1,637 or less per month. The current levy rate is 1% of the monthly remuneration, or \$1.64, whichever is greater. One distinguishing characteristic of the SDF is the strong role of employers. Seven of 15 members of the Singapore Workforce Development Authority—the agency that controls the SDF—represent employers (including the chair and vice-chair), compared with four for government and three for workers. Training incentives are offered on a cost-sharing basis, and the training must be relevant to the economic development of Singapore. The amount of incentives that a company can obtain is not tied to the levy contribution.

The SDF provides financial incentives for training those in the workforce, those preparing to join the workforce, and those reentering the workforce. In its effort to support company training, the SDF provides grants on the basis of approved training plans through the Total Company Training Plan Scheme. It also promotes special training programmes focusing on upgrading workers' skills. This includes the Training Assistance Scheme, which aims at all types of skill upgrading. In addition, the SDF finances training vouchers and assistance for information technology training for small and medium-sized enterprises. It promotes a systematic approach to skills certification through the Skills Certification Plan for training at least a third of a company's workforce in certifiable skills over a 3-year period. In addition, the SDF supports a training leave scheme for older workers and on-the-job training consultancy services for accelerating skills development in the knowledge economy.

Source: R. Johanson. 2009. A Review of National Training Funds. SP Discussion Paper. No. 922. Washington, DC: World Bank (p. 29/in ADB, 2017.

Core Attributes of PPP

Critical attributes/dimensions to be considered in promoting PPPs in the TVET sector include governance, financing and training.

> Governance

The nature of TVET governance at national and regional level significantly influences the effectiveness of the system and the types, nature and strength of partnerships.

The presence of an appropriate national framework involving active stakeholders (representatives of enterprises, workers, learners and civil society) in the planning, management, curriculum design and qualifications development and assessment appears to be critical.

Most countries have a high-level governance structure to promote PPPs at the national level. The National Skills Development Cooperation in India, which is 51% industry-owned and 49% government-owned, is a typical example (Dunbar 2013).

In Malaysia, the Human Resource Development Council was made up of a team of diverse stakeholders including representatives from employer organisations, government departments, and independent members of society. This new agency took over the work of the public vocational sector, which had made little impact on skills development and growth in the labour force (kruss 2017).

In **Singapore**, the Ministry of Education established the Institute of Technical Education as the primary provider of career and technical education. Its governance model, described as unique was chaired by the Chairman of an Engineering firm, Jurong Engineering Ltd. Half of ITE's board of governors were representatives of corporate partners. The ITE board oversaw governance issues related to policy formulation, curriculum development, student intake, quality assurance and consistency of standards across the colleges (Amornvuthivorn, 2016).

While the Korean system remains strongly government-led at national level, the fundamental reorientation of the sector to a National Qualifications Framework led to substantial engagement from the private sector at regional and sectored level. Through a number of policies by the Ministry of Labour and related mechanisms such as the Employment Insurance Scheme, the private sector has been incentivised to engage in skills training with significant success (kruss 2017).

In each of the above mentioned cases private sector involvement in TVET governance enabled the sector of playing key roles as a partner with TVET providers in the policy and strategic planning, management, design, funding and assessment of the training programmes. The used governance structures supported the shift from the supply driven towards demand driven approach that based on actual skills needs of employers.

Funding

Compared with general education, TVET costs are higher in regard to initial investment as well as for running expenses. Therefore, in most countries where financing of TVET is solely a public sector responsibility, it forms a serious challenge for governments usually leading to significant shortage in financial resources required for quality training that cope with continuous technical developments in industry.

Looking for additional funding resources became a necessity to enable TVET of playing its key role in the economic development. As private sector is direct beneficiary of well-developed TVET system outcomes, contribution to its funding became a main dimension of real partnership with TVET institutions. Involvement of private sector in funding TVET ensures the active participation of employers in directing and delivering efficient mechanisms for training as well as strengthening a result-oriented, and competitive system. Different funding mechanisms are used around the world to provide additional resources for financing TVET system through involvement of the private sector such as levies, tax incentives, vouchers and student loans.

Levies

Levies system is a statutory scheme under which taxes raised from firms go into a public budget for training. It may be based on various criteria such as payroll, turnover, output, contract value, production costs, or profits (Gospel, 2012).

In Hungary, enterprises contribute to the funding of initial vocational education and training in the school system and the provision of continuing vocational training for employees through a tax of 1.5% of wage costs. The tax levied on enterprises finances the Development and Training sub-fund of the Labour Market Fund. The tax is referred to as the 'vocational training contribution'. Up to one-third of the tax can be spent by companies on CVT for their own employees, but only on training programmes included in the National Vocational Qualification Register. Up to 75% of the tax can be contributed directly to vocational schools, for the organisation of practical training for students, or to cover the costs of training in money or in kind, or by providing direct financing.

Source: Masson, J-R. (2005) Financing Vocational Education and Training in the EU New Member States and Candidate Countries, ETF

Tax incentives

This system provides incentives as tax reductions or tax rebates for firms that bear all or part of the costs of training. The system aims at encouraging companies to support training and provide donations:

For example, "in Singapore" funding for the Institute for Technical Education (ITE) is through the ITE Education Fund, which is linked to the Institute of Public Character (IPC) which is governed by a Management Committee. It raises funds through a number of tax-incentivised donation strategies. The Fund issues donation receipts to employers for tax deductions up to 2.5 times the value of the donations. Furthermore, donations are recognised on the ITE webpage and Donors Wall located at the ITE Headquarters, while the Prime Minister provides matching grants to the Education Fund for every dollar raised from private donors. These strategies have ensured that the ITE's training becomes more responsive to the needs of the employers who pay for the training, to ensure sustainability of funding".

Source: Amornvuthivorn, Kessara "Public-Private Partnerships (PPPs) in Technical Vocational Education and Training (TVET): Lessons Learned from Singapore and U.S.A. and Implications for Public Management in Thailand" Journal of Public and Private Management 2016.

According to referenced reports/studies, both levies and tax incentives:

- 1. Are unlikely to work well in countries where industry is not well-developed and administrative or organizational capacity is weak.
- 2. Tend to favour large companies, unless mitigating measures are introduced.

> Vouchers

In a voucher system, it is the trainee's decision to select the type of the training courses they want to join and the training provider/institute where to get the training. This system promotes competition among training providers, leading to better relevance and quality of the training on one hand, and encourages private sector training providers, when the system is open for both sectors on the other hand. The related training costs/fees are paid directly to the training institution against the value of vouchers for the trainees who joined the training in the institute.

Tax-funded education vouchers have been tried in some countries, including Chile, Colombia, Bangladesh, Guatemala, Belize and Lesotho, some states in the US, Poland, the UK and Sweden. They allow a learner (or learner's parent) to choose where to spend public funding for education and training. West (1996) suggests that vouchers systems: support consumer choice in education; enable people to 'shape their own destinies'; promote competition between providers; and enable private provision to enter the publicly-funded education market. The evidence on vouchers systems is mixed. In a summary of the literature the International Initiative for Impact Evaluation (3ie) (2010) found that there was a small but inconclusive body of evidence suggesting that voucher schemes 'improved performance' in schools, however the same schemes were also found to increase social segregation and inequality.

Source: City & Guilds (2012) Learner First: International approaches in policy and practice/in Dunbar, 2013

TVET and Practice

It is widely recognized that training provision by public sector alone cannot cover all needed skills in the labour market. This promoted trends towards more involvement of private sector employers in the training provision through a type of PPP structure.

A combination of in-class learning and on job training in companies proved to be a successful TVET programme. If applied correctly, it usually leads to relevant and quality skills training. Also, the workplace training assists employers on one hand, in hiring skilled workers according to their needs and on the other hand, the trainees in adapting to working conditions and finding jobs. A good example of such combined training and partnership between TVET providers and employers is the dual system in Germany, which is recognized worldwide as a successful system.

Partnership of employers with TVET providers includes their involvement in the development of curricula, provision of access to specialized equipment, contribution towards supplying learning materials, offering on-the-job training and work experience to trainees and participation in the assessment of trainees.

In Singapore, the programme at the ITE was designed along a number of components, which all involved some form of partnerships with different private partners. At Centres of Technology, curriculum is designed based on appropriate job analysis, liaising with industry partners in the training of learners. Training is largely work-specific and aligned with industry needs and standards. Through traineeships, ITE partners in the development of relevant skills along with employers interested in recruiting secondary school graduates. Learners enroll in ITE designed programmes that will lead to nationally recognized ITE certifications. The programme includes both on-the-job training at the company's site and off-the-job training conducted by ITE or an approved training center on released days. These approved training centers can be at some employers who have been qualified by ITE as approved training centers.

ITE provides advice on facilities, equipment, curriculum, course design, testing procedures, pedagogical and instruction skills as well as in the planning of on-the-job and off-the-job training. ITE also supports its students with career guidance prior to registration and during the course of the programme (Amornvuthivorn, 2016/in Kruss, 2017).

Success Stories: Comparing PPP in TVET across some countries

Table 1.1 shows different levels of private sector involvement (PPPs) in TVET in regard to governance, implementation and funding aspects in some of the developed and developing countries in the world, together with the success factors (challenges) encounter systems in those countries.

Table 1.1 PPPs in TVET across some countries

Country	Education system	TVET Governance model	Forms of training at TVETs	Finance mechanisms	Success factors (challenges) of the system
Most of USA, Great Britain and Global North countries	Liberal Market Economy	Privatisation of TVETs. Usually governed by skills councils or industry or sector councils in a PPP contract	 Wide variety of education or training institutions. The NQF awards credit for all accredited courses within the system. Community colleges provide off-the job training and apprenticeships. Close contact with firms provide for placement for on-the- job training 	 Initially financed by firms and private. Increasing forms of PPPs such as the voucher systems (UK), grants (USA), skills levies and other forms of co-financing. 	 Efforts to integrate TVET as a highly regarded alternative to general. Industry volunteers to provide opportunities for on-the-job training. Highly responsive to market needs as employers provide majority of training. Training could be very narrow such that skills are not applicable to other sectors.
Germany	Dual (corporatist) system: State provides appropriate environment for PPPs	PPPs governed by 'intermediary' institutions/chambers independent of the state and private companies. Yet regulate vocational qualifications.	 Dual training of classroom and industry base training Enrols more than 50% of all students from upper secondary. 	Largely state-subsidised with voucher system	 High quality basic education level Role of state and business ensure responsiveness but also quality. Vocational schools combine 2- days in classroom with 3-days at professional employers. Integrated TVET and general education pathways.
France	State regulated	The State Ministry is the central player in skills	Integration of practical components in upper	State funded at all public institutions.	The model provides consistency in qualification

		development. Determines skills needs and training process	secondary training and professional schools (grande ecoles) Three pathways after sec. school: univ (4 year degree); technical colleges (2 year training); lower grade vocational training		levels within occupational skills categories.But highly bureaucratic and less responsive to market demands.More politically influenced.
Singapore	Highly centralised	 Institute of Technical Education as the main TVET provider The ITE governed in a PPP model 	 Combination of in-class training and exposure to traineeship, on-the-job training in partnership with large number of employers and employer associations. Reduction in number of core modules in favour of more-cross-disciplinary studies 	 funded by a combination of mechanisms, via: Tax incentives, donations, matching government grants, scholarships, etc. Voucher system also existed 	 ITE governed by a board of 20 members: with half of the members representing corporate partners. Chaired by chairperson of an engineering firm. Works very close to industry for practical skills. Coherent planning across all relevant government agencies. Singapore has one of the best basic education system in the world. Rebranding of TVETs from 'dumping ground' status. TVET and polytechnics area viable route to university
Malaysia	Federal democratic system	Governed as a PPP under the Human Resource Development Council. HRDC composed of reps from employers, government departs, and independent members	 With the shift from vocational to technical schools in the 1990s. Vocational schools emphasis academic subjects and skills training; while technical schools focus on more science and math based subjects 	 Government provides some financing Bulk of finance comes from skills levies from employers, which are paid to companies to train. 	 Based on the high demand of skills in the growing economy, government could steer industry into training. Emphasis was placed on practical training in vocational training. The PPP between government, training institutions and industry was a

			 Majority of training takes places in the private sector through in-house training. 		success in governance and financing TVET.
South Korea	Strong centralised system	TVET government run under the MoE and HR. Policies are centralised at national level. Less PPPs.	 Vocational and general system exist. Training is largely in government technical schools. 	 Financing is from government with tax from firms. Some firms provide private qualifications 	 Good basic education system. Responsive government policies. Growing economy with high skills demand.
Mauritius	Market economy	Mauritius Employers Federation and Industrial and Vocational Training Board in PPPs		 Skills levy of 1% of wage bill into the IVTB. Grant refund by government to companies that train. 	 System is largely owned by the private sector. The equal government – private representative in the IVTB supports better management and responsiveness. Close partnership between government and business.
Rwanda	Market economy with strong state control	Government ministries. With little or no input from the private sector	 TVET and general education are largely separated. TVET training is largely misaligned to the skills needs of employers and hence irrelevant curriculum. H- Class sizes are too large and system is largely under- resourced. Lack of practical exposure. 	• Financing is largely from government and insufficient.	 TVET system is largely dysfunctional and unresponsive to skills demands. Limited funding and resourcing. Need for a skills levy and better management/governance structure (PPP).

Source: Kruss, Glenda "Synthetic analysis on the skills development and economic responsiveness role of education and training institutions in South Africa: TOWARDS AN INTEGRATED PUBLIC-PRIVATE PARTNERSHIP STRATEGY FOR SKILLS DEVELOPMENT IN THE TVET COLLEGE SYSTEM" LMIP PROJECT, September 2017.

Desk Review

The initiatives and available evidence of PPP being implemented in Jordan

PPP initiatives in TVET in Jordan are implemented by TVET providers in partnership with one or more of the related stakeholders such as companies, employers associations, ETVET Fund and international organizations.

Following, are examples of the implemented PPP initiatives in Jordan:

Sector Skills Councils (SSCs)

SSCs are advisory committees consisting of representatives from related public sector institutions, employers and employees. The majority of members are representing private sector employers and are required to have long work experience in the targeted sector. Councils aim mainly at proposing the main policy, identifying skills needs and developing occupational standards for TVET in the sector. SSCs are currently formed by ETVET council with support from international organizations, including GIZ, ILO and EBRD projects in Jordan. The initiative is still to some extent in its early stage, and the number of established or under establishment councils is seven in the sectors of: water and energy, ICT, Logistics, tourism, garments, furniture and chemicals. Occupational standards developed by sector skills councils are provided to CAQA for accreditation (Interviews with SG/MOL and CAQA director).

Model Skill Centers of Excellence (MSCoE)

A conceptual framework for the Model Skill Centers of Excellence (MSCoE) was developed by the Ministry of Labour in the year 2010. MCoEare "TVET Training Institutes developed through Public Private Partnerships (PPPs) between the Government of Jordan, training Institutions and industry". They are "sector-specific and geared towards identified needs for employment within that sector". The framework describes the management structures for MSCoE and outlines a "key performance indicator system" including the core elements 'Leadership', ' Organization & Communication', 'Planning and Control', 'Facilities Management', Programme design' & Delivery, 'Programme Quality & Assessment', 'and 'Student Recruitment & Support'. Additionally, it includes a checklist for implementing MSCoE for the feasibility, planning, and implementation phases.

The goal of MSCoE is to produce highly skilled graduates equipped with the skills and qualifications demanded by today's labour market, both locally and internationally (ETF, 2016).

Partnership in MSCoEs includes cooperation in developing the training programmes, curricula, learning materials and text books, training equipment, training implementation (off and on-thejob), staff training and management of centers, in addition to provision of employment opportunities for graduates.

VTC had established MSCoEs in three priority sectors of the Jordanian economy as defined by the Government of Jordan covering pharmaceuticals, water and environment and renewable energy.

The EU supported development of curricula and learning materials as well as operational plans for the three established MSCoEs. Other international development organizations also involved in supporting those centers were: GIZ through its TWEED project (supported the water and environment CoE) and USAID through the WFD project (supported renewable energy MCoE). Annex 1 shows more details about the case of partnership between different stakeholders in the establishment and operation of the pharmaceutical MSCoE.

Saltus training hotel

The training hotel is located in Balqa governorate at the outskirt of Salt city. Partners in the hotel, which was opened in 2014, are VTC and the National Hotels Company owned by ZARA Holding Company. Partners have roles according to the partnership general framework, approved by the cabinet listed as follows:

VTC:

• Provision of the already existing buildings, which consists of 23 guest rooms and other service facilities. The provided building used to be part of the VTC training institute for hospitality.

ZARA Co.:

- Renovation of the buildings/facilities and provision of required equipment necessary for appropriate operation of the hotel.
- Marketing, operation and management of the hotel to receive guests as a three star hotel.
- Providing on job training for the VTC tourism training institute trainees in food production, service and housekeeping for 6 months at levels 1 and 2.

The hotel is managed by a board of directors, consisting of of six members representing the two partners. The income generated is used solely to cover the operation costs as well as developing its infrastructure as required for improving the hotel services. Intake capacity of the hotel is 120 trainees.

> Employer-specific training programmes in Al-Huson University College (AHUC)

(Al-Wedyan, 2009).

The programme was launched in 2009 in BAU/Al-Huson University College in Irbid north of Jordan. It is 6 months training programme-targeting participants having associate degree, typically in production engineering, or alternatively two-year AHUC Associate Degree programme in piping technology-targeting participants having general secondary certificate. The programme aims at training participants as "Piping Supervisor".

Partners in the implementation of the programme includes: Al-Huson University College through its center of career development (Al-Huson CDC), Consolidated Contractors Company and the Morganti Group Inc. (CCC/MORGANTI) and the USAID Jordan Economic Development Programme (SABEQ).

Roles and responsibilities of partners:

> AHUC/Al-Huson CDC:

- Providing classroom and laboratory space and covers the costs associated with renovation, rent and utilities.
- Recruiting and enrolling programme participants.
- Providing instructors to participate in a Train-the-Trainers programme conducted by CCC/MORGANTI staff to become permanent instructors in the programme in the future.
- Providing computer skills, workplace preparation, and English proficiency training.

CCC/MORGANTI:

- Providing training equipment, curricula and learning materials and instructors.
- Training for AHUC instructors so they will be able to take over the programme in the future.

- Conducting field trips to demonstrate the work of "Piping Supervisors" at actual construction sites.
- *USAID/SABEQ:*
 - Preparation of Memorandum of Understanding.
 - Convening regular partners' meetings for progress review.
 - Establishing benchmarks for progress and indicators of performance.
 - Managing, monitoring, and evaluating.

The annual intake capacity of the programme is (25), and the number of graduates during the period from 2009 up to now is about (250) (meeting with BAU Vice President).

Summary of reviewed literature related to PPP in TVET

Based on the review of relevant literature on PPPs in TVET in Jordan, it was found that:

- Jordan had recently issued a special legislation for the PPP, law No 31, in 2014, which aims at
 promoting cooperation between public and private sector. For facilitating the implementation
 of the law, a PPP unit within the ministry of finance was established. However, the PPP law is
 general and not related specifically to PPP in TVET.
- No integrated framework to ensure effective involvement of the private sector and other social partners in TVET at different levels including national, provincial and local, in various dimensions of partnership that cover policy and strategic planning, funding and training practice.
- Except for the Vocational Training Corporation (VTC) and the National Company for Employment and Training (NET), other training providers in Jordan have very limited partnership links with employers particularly in regard to training implementation using work-based training methods.

However, relatively good progress towards more involvement of the private sector in TVET in Jordan took place in the last two decades, which can be observed through:

- National policies and strategies developed in Jordan: "National Employment Strategy (2011-2020), ETVET strategy (2013-2020) and National HRD Strategy (2017-2025)" included key policies and strategies aiming at promoting PPP in TVET in Jordan.
- Involvement of private sector and social partners in the sector policy planning at the national level through their representatives in the ETVET council. Also through their participation in financing/steering committees of institutions work under the council direct authority (ETVET fund and the Center of Accreditation and Quality Assurance - CAQA). This enabled the private sector/employers and other social partners to some extent to play a role in directing the ETVET policies and strategies.
- Implementing of initiatives/projects in TVET in partnership with private sector/employers and social partners. International organizations/donors such as USAID, GIZ, JICA, EU and ILO were involved in some of these initiatives. Examples of those partnerships are: establishment of sector skill councils, establishment of centers of excellence and Jordanian youth training and employment projects.

Funded initiatives and projects in the context of partnership between the TVET and labour market and the world of work in Jordan

Establishment of ETVET Fund

Establishment of ETVET Fund in 2008 was to replace the TVET Fund established in 2001. Its main objective is financing demand driven training activities linked with employment through partnership between TVET providers and the private sector, within the national strategy of reducing unemployment and encouraging economic growth in Jordan (http://www.etvetfund.gov.jo/).

Financial resources identified for the ETVET Fund were Tax levy of 1% on private enterprise profits, revenues from foreign workers' permits, and government contributions. The new Tax Law of 2009 eliminated the tax levy, leaving the Fund mainly reliant on the revenues deducted from workers annual permits fees issued for visiting workers (100 JOD for each issued permit according to the Fund's Director General). However, the collected fees are transferred to the ministry of finance and allocations for the fund are transferred based on the estimated annual budget requested by the fund. Dependence of the fund on visiting workers' fees raise a question about the sustainability of the fund, which contradicts the national strategy of replacing visiting workers with Jordanians.

Although ETVET Fund is open to finance training and employment related initiatives/projects proposed by institutions from either public or private sectors, the majority of financed projects were implemented by the public sector bodies. Examples of institutions/projects that received financing support from ETVET include: VTC, National Employment and Training Company (NET), National Training and Employment Project (NTEP), MOL, BAU/CCs, Chambers of industry/commerce, Engineers associations and universities. The supporting finance covered different aspects of employment/training related projects/initiatives costs such as: training fees, equipment, buildings construction/renovation, row materials, trainees wages subsidies, during on-the-job transportation and insurances training and staff salaries (www.etvetfund.gov.jo).

Satellite factories initiative/project

The initiative was launched in 2008 as part of the National Training and Employment Project in the Ministry of Labour, within the ministry efforts to reduce unemployment, particularly among females in the rural areas in Jordan. It aims at encouraging companies/investors to establish sub/new factories in the targeted areas to provide employment opportunities, mainly for females.

Main partners in this initiative are NTEP/MOL, ETVET Fund, Royal Court and companies/investors. In addition, other partners could be involved according to each individual case, such as the municipality within the targeted area and VTC.

Public sector partners in general provided the building for the factory free during the first 5 years and at 75% of the prevailing rent price after that period. In addition, public sector partners' contribution include up to 50% of wages, transportation, one meal and social insurance costs of the newly hired employees for the first 12-18 months of their employment.

On the other hand, the company/investor is responsible for provision of the machines and equipment, wages, incentives and other operational costs for running the factory, as required.

While the ETVET Fund is the main resource for financing the public contribution in the initiative, other funds came also from the Royal Court and MOL, and in at least one case, a municipality paid for the cost of the factory land. Contribution of VTC was in basic training for the new employees, if requested by the company.

The MOL project NTEP was responsible for the planning, organization and follow up of the implementation of the satellite factories initiative until about 6 years ago when NTEP was stopped and the initiative came under the responsibility of the employment directorate within the MOL. A training and employment agreement usually signed between the involved partners that mainly identifies each partner's roles and responsibilities, number of employees to be trained and employed, wages and incentives provided for the trainees/employees and duration of each stage of the training and employment.

Number of satellite factories established and operated until 2015 was 15 factories distributed in different governorates in Jordan, in which about 3500 employees mostly females (91%) are working. All the established factories were in the garment industry (Al Khasawneh, 2016).

PPP, National Social and Economic Landscape

The population of Jordan is 9,531,712, according to the 2015 population and housing census conducted by the Department of Statistics (DOS). The number of Jordanian citizens is 6,613,587 representing about 70% of the total population, while non-Jordanians (mainly Syrians) are 2,918,125 (30% of the population).

According to the aforementioned census, populations in Jordan are concentrated in three governorates, the capital Amman of 4,007,526 (42.04% of the total population), Irbid of 1,770,158 (18.57%), and Zarqa governorate of 1,364,878 (14.32%). Populations in the remaining nine governorates are 2,389,150 representing about 25% of the total population in Jordan.

Number of Jordanians aged 15 and older in 2015 equaled to 4,381,377 of which only 1,607,599 were economically active. The size of the workforce in Jordan in 2015 totaled to 1,922,644 of which 1,398,030 were Jordanian employed workers, 209,569 unemployed and 315,045 visiting/foreign workers having work permits (DOS/Labour statistics in Jordan (2011-2015)).

In the year 2017, the crude economic activity rate (%) in Jordan (labour force divided by total population) equaled to 26.1% (11.6% for females and 40.2% for males), while the refined economic activity rate (labour force divided by the population aged 15+ years), was 39.2% (17.3% for females and 60.8% for males). It can be observed here, the low participation rate of women in the labour market, which is a feature that has persisted for a decade, and is considered as one of the lowest rates in the world.

The large influx of refugees to Jordan due to turmoil in the region has impacted the labour market, especially lower-level jobs. Consequently, this led to two main implications on the Jordanian labour market: a loss of employment opportunities for Jordanians in low skilled jobs, and a deterioration of working conditions.

The unemployment rate increased up to 18.3% (females 31.2%, males 14.7%) in year 2017, compared with 15.3% (females 24.1%, males 13.3%) in year 2016 (DOS, Statistical Yearbook of Jordan 2017). The unemployment rate among youth (15-29 years) was 29.5% in year 2017, while the highest percentage of youth unemployment was among those with less than secondary education level (46.2%), followed by those having a university degree (37.5%) (DOS-analytical summary based on workforce survey 2017).

An important element that affects employment/unemployment in the labour market in Jordan is the attitude of Jordanians towards work. The ILO youth transition study found that young males rejected job offers in the majority of cases on the grounds of low pay (58%), while inappropriate workplace conditions (28%), followed by low pay (26%), were the most important reasons given by young females (ILO, 2014).

Also, employers in the private sector often praise the employment skills of foreign workers and their willingness to work hard, put in long working hours, and be flexible; on the other hand, they complain about the high expectations of Jordanian youth, whose increasing levels of education lead them to expect well-paying desk jobs close to home (TRP 2016-2017/Jordan).

Jordan's economy is among the smallest in the Middle East, with insufficient supplies of water, oil, and other natural resources. The Gross Domestic Product (GDP) at current market prices- nominal for the year 2018 was 29,984 million JD (42,277.4 million USD), and the per capita GDP was 2,908.5 JD (4101 USD) –(Source: DOS estimation). Contribution of the different economic sectors to Jordanian GDP for 2017 is shown in table (1), of which it can be noticed that the highest contribution is coming from the financial & insurance services sector (20.7%).

Economic Sector	Contribution to GDP %*
Agriculture, Hunting, Forestry & Fishing	3.5
Mining & Quarrying	1.6
Manufacturing	16.2
Electricity & water	2.5
Construction	4.5
Wholesale, Retail Trade, Restaurants & hotels	9.8
Transport, Storage & Communication	14.8
Financial & Insurance Services	20.7
Social & personal services	4.6
Producers of government services	11.1
Net Taxes On Product	15.3

Table 1. Contribution of economic sectors to Jordanian GDP for 2017

Source: Department of Statistics/Jordan in Figures 2017* Preliminary Estimates

Growth of (GDP) at constant market prices – real GDP- in Jordan between 2000 and 2009 averaged 6.5%, but from 2010 until 2016, average growth was a mere 2.5% annually. Furthermore, Jordan's total public debt has increased exponentially, exceeding economic growth. By the end of 2017, the debt-to-GDP ratio was 95.9% (Jordan in Figures 2017/DOS).

The political instability in the whole region following the Arab spring is one of the major factors explaining the decrease of foreign investment observed during the last years.

The private sector in Jordan consists of small and medium enterprises (SMEs) which represent around 94% of the existing companies, are accountable for more than 60% of the economic output, and employ more than half of the labour force. SMEs face several constraints for their growth, such as rigidities in the labour market and poor access to finance (TRP 2016-2017/Jordan).

Mechanisms and Structures of Funding and Financing

The main source of financing TVET in Jordan is public. In MOE, in addition to the public financing, which is providing the funding for the basic functioning of vocational schools, other financing comes from international donations and loans, students fees and sales of products/services by schools.

The World Bank SABER Jordan report of 2015 indicated the following notes regarding the resources committed to ETVET sector:

Education spending as percentage of the GDP has gone down from 4.9% in 2001 to 3.8% in 2011 [...] the education budget is distributed across six entities of which MoE consumes the largest share (86%). Employees in education represent 40% of public sector employment, where 92% percent of the recurrent budget is spent on salaries.

From the overall 2011 budget for public education, 2.81% was spent on secondary vocational education (MoE) (which represents 3.2% of the Ministry's budget and 20% of the combined secondary and vocational education budgets), and 1.4% was dedicated to vocational training (VTC). As is the case in countries with advanced WfD systems, in Jordan the costs per instructional hour per trainee in TVET are higher than those in academic programmes at comparable levels of instruction: JD 365 per academic secondary student, JD 813 for MoE students (average enrolment 25,000 per year) and JD 1,300 for VTC students (average enrolment 10,000 per year).

Source: TRP 2016-2017/Jordan

Also in VTC, the main funding source comes from the public budget, and additional funding comes from international donation and loans, trainees' fees and sales of products and services by the training institutes.

In both MOE and VTC, the budget is defined annually, based mainly on salaries of the staff (consumes the highest percentage of the budget), needed equipment, raw materials, and maintenance. The requested budget by MOE/VTC is subjected to cuts according to MoF financial constraints before being approved. Allocated financial resources are managed centrally, and the individual school/institute has no or very little authority on spending financial resources even those generated internally by the school/institute which hinders both efficiency and development.

In technical education in the public community colleges, funding is coming from BAU, which in turn gets its resources mainly from students' tuition fees, support from MoHESR and international loans and donations. BAU allocates funds to public community colleges based on historical trends, student numbers and staffing levels. As well as technical education programmes, most community colleges now offer both BA and diploma programmes. Diploma programmes tend to suffer from a large funding gap, particularly as regards to up-to-date facilities.

The establishment of the ETVET Fund in 2008, added other important resources for financing training initiatives linked with employment in the labour market and for enhancement of TVET programme quality. The Fund could give TVET institutions opportunities for partial compensation of the public finance shortage in funding innovative demand driven training initiatives as well as enhancement of the delivered training programmes quality.

Specific criteria for funding training/employment initiatives/projects were issued by ETVET Council in 15/6/2015 (published on the Fund's web site <u>http://www.etvetfund.gov.jo</u>). Applying for the financial funding is open for both public and private sector entities providing that they meet the issued criteria conditions. For studying, the finance requests applied to the Fund, projects financing committee was formed by the ETVET Council. The committee consists of six members appointed by the council upon recommendation from the council chairman (minister of labour). Three members of the committee are selected from the private sector and one from the civil society institutions. Membership in the committee is for one year that can be extended for only another one year. The assigned members select one of them as chairman for the committee.

The received projects financing applications are reviewed and evaluated by the committee to take the decisions/recommendations according to their authorities. In case of recommendations, the ETVET Fund take related final decisions for financing.

Upon approval of financing the project, an agreement/memorandum of understanding is signed between ETVET Fund and the benefited institution that include mainly each party commitments and general conditions for the implementation. The ETVET Fund staff is responsible for the monitoring and evaluation of the implementation of different stages of the project.

As shown in table (2), total finance provided by ETVET Fund for different sectors during the period (2005 – 2016) summed up to JD 272,279,513.

Sector	Number of institutions/projects	Finance sum (JD)	Percentage
Public	23	256,286,256	94.1
Civil society institutions	29	11,634,406	4.3
Non-governmental institutions (NGOs)	7	2,333,639	.8
Private sector	9	2,025,312	.8
Total	68	272,279,513	100

Table 2. ETVET Fund financial support for different sectors during the period (2005 – 2016)

Source: ETVET Fund web site/projects/date: 22/2/2019 (http://www.etvetfund.gov.jo)

As it can be noticed from the table, most of financed training/employment projects were implemented by the public sector institutions (94.1%).

In summary, financial resources for TVET system in Jordan are based mainly on the government budget, which distributes the relatively limited available allocations according to inputs and not performance, which results in little investments in innovation in service delivery. Establishment of the ETVET Fund was a good step in providing additional funds for TVET that can be used as a mechanism for providing incentives to increase TVET efficiency and effectiveness.

PPP Implementation

Policies

Partnership with private sector policies were highlighted in all development national plans related to ETVET sector in Jordan such as employment strategy (2011 - 2020), E-TVET strategy (2014 - 2020) and the national human resources development strategy (2016 - 2025). Those national strategies recognized the importance of and emphasized the private sector role in TVET development. It particularly, directed towards more involvement and partnership with the private sector in governance, finance and implementation of TVET in Jordan.

Within the latest developed strategy "National Human Resources Development Strategy (2016-2025), five strategic objectives were identified to develop the TVET sector, covering the five strategic principles/themes of accountability, quality, access, innovation and mindset.

Almost all identified strategic objectives supported involvement of the private sector and consequently PPPs to some extent. However, the strategy emphasized particularly the role and involvement of private sector in the projects and activities related to strategic objectives in the areas of accountability, quality and innovation as detailed in table 3.

Strategic objective	Project	Private sector involvement (role/activities)
 Put in place clear governance structures to ensure accountability across the sector (accountability). 	 Design and Establish the Skills Development Corporation (SDC). 	 The private sector is planned to play a leading role in the new SDC (two thirds of SDC board members as well as the chair to be from the private sector). The new SDC will be accountable to Government through the Council of Ministers. SDC responsibilities will be: Mandate and harmonize all national skills and TVET policies for Jordan. Ensure alignment between TVET provision and national labour market strategies and requirements. Oversee/direct the Centre for Accreditation and Quality Assurance. Oversee/direct the Skills Development Fund (supposed to replace current ETVET Fund. Monitor and evaluate TVET reforms across all Ministries and private providers.
 Increase the quality of TVET through consistent training requirements for TVET instructors, aligning standards and quality 	 Establish standards and training requirements for TVET 	 Cooperating in upgrading vocational trainers/teachers' technical knowledge and skills through applying periodic secondment of TVET staff to industry.

Table 3. Private sector involvement according to strategic objectives identified in TVET sector within the areas of accountability, quality and innovation in NHRDS (2016-2025)

assurance for all institutions, and closer coordination with private sector (quality).	trainers and instructors.	• Applying capacity building measures to enable the private sector of playing a meaningful role in TVET provision.
	• Transfer the CAQA to the SDC.	• private sector through the new established SDC will have more role in the accreditation, certification, and quality assurance of the training providers, programmes, graduates and the training process in general.
	 Align TVET provision to the National Employment Strategy and Jordan 2025 goals 	 Develop a range of new sector skill councils (SSCs) – employer led advisory committees covering skills and training needs for specific priority industries and sectors (including public services). Strengthen the capacity of the private sector, including the Jordan Chambers of Industry and Commerce, to identify their own/their members' skill needs and develop training programmes/and provide them with information on existing public and private training offerings.
 Innovate funding and provision in the sector through transforming the E-TVET Fund, PPPs, and expanding innovative modes of delivery (innovation). 	 Establish a Private Sector- led Skills Development Fund (replacing current ETVET Fund). 	 Private sector will have more control on the allocation decisions since two thirds of the fund's board/committee members are from private sector. Private sector contribution to the fund resources will be increased through: Reintroducing the enterprise levy in addition to the current source of revenue for the E-TVET Fund (deduction from foreign worker permit fees and direct allocation from MoF).
	 Establish new PPPs aligned with priority clusters identified in Jordan 2025. 	 Establishment of a set of PPPs in the TVET sector whereby public TVET providers and industry work collaboratively in planning, financing and implementing effective training programmes in priority clusters that have been identified in Jordan 2025 with goals that meet industry needs. Decentralise the functioning of the VTCs to have greater autonomy, so to l ink to private sector partners and run TVET provision along more business lines.
	 Expand apprenticeship programmes. 	• Private sector will have more involvement in implementing the training programmes since about 50% of the training is conducted in industry work sites for apprentices.

At TVET institutions levels, VTC, MOE/VE and BAU/CC stressed the importance of partnership with private sector in their adopted long-term strategic plans.

In its strategic plan (2015-2024), one of VTC strategic objectives was to increase public sector, private sector and civil society involvement in the training system. For realizing the partnership strategic objective, VTC identified 10 projects among which: training in hotels specialties, establishment of COEs and training in leather works.

In the MOE recently developed strategic plan (2018 – 2022), and under the strategic objective "To increase access to vocational education and improve its quality" in domain 6 (vocational education), the defined specific objective to improve the quality was "Establishing effective partnership with private sector for developing vocational education". The main indicator identified for partnership was number of private sector companies offers of on job training for vocational education students.

In BAU strategic plan (2017-2021), partnership with public and private sectors was one of main purposes of the strategy. Accordingly, the strategy identified the following measures and the related performance indicators towards achieving the mentioned purpose:

Measures	Performance indicators
Building partnerships between technical community colleges and the private sector	 Increase in private sector investment in technical education.
Quality control of technical education and	 Increase of private sector representatives in technical education activities. Number of partnerships with private sector.
Strengthen relations between technical community colleges and production establishments.	 Increase in number of private sector representatives in advisory committees for developing study plans and in colleges' councils. Increase in the number of signed cooperation agreements with production sectors. Increase in the number of graduates employed in the production sectors.

Legislations and legal regulations

The main legislations regulating partnership between public and private sectors in Jordan include: Public-Private Partnership Law No 31 of 2014, ETVET Council Law No. 46 of 2008, Labour law No. 8 of 1996 and its amendments and VTC Law No. 11 of 1985 and its amendments.

> Public-Private Partnership Law No 31 of 2014 - PPP Law

The law is general and not specific for PPP in TVET sector. It aims to encourage the participation of the private sector in the Kingdom's economic development and provide a legislative environment for joint projects between the two sectors. Although the law may facilitate implementing some forms of partnerships like building and operating training facilities, it does not actually provide an integrated legal framework for developing effective PPP in the TVET sector in areas like governance, funding and training implementation.

However, other acting laws related to ETVET in particular in Jordan, tackled some areas of partnership through articles that imposing a sort of private sector involvement in TVET as detailed in the following paragraphs:

Labour law No. 8 of 1996 and its amendments

Involvement of employers/private sector in vocational training is covered in section 5 (vocational training contract) in the labour law in Jordan. It did not legally enforce any type of partnership/cooperation in TVET on employers, but articles 36, 37, and 38 indicated the following requirements for conducting work place training in enterprises:

- Work place conditions are adequate for training.
- The in company trainer is qualified in the related occupational area.
- A written training contract is signed between the employer and the trainee, and the contract includes training period, stages, and wages, providing that the trainee's wage in the final stage is not less than peer workers' wages;
- VTC regulates the training programme and the contract.

ETVET Council Law No. 46 of 2008

According to ETVET Council law, the council aims at promoting TVET level and providing employment opportunities for developing human resources in order to achieve comprehensive development in the kingdom. Its main tasks include: proposing ETVET general policies, plans and programmes to be approved by cabinet, coordinating between ETVET institutions, approving occupational standards and training programmes accreditations requirements and approving general policy for ETVET Fund and CAQA, which fall under its oversight.

The ETVET Council's Board of Directors is chaired by the minister of labour. It has 16 members, out of which seven members are coming from the private sector/civil society institutions. While three members of the private sector/civil society are named by their institutions, the other four members are actually selected by the chair (minister of labour). Through their members in the board of director of ETVET council, private sector partners can play a role in the general policy and governance of the ETVET sector.

On the other hand, private sector according to the ETVET Fund projects financing criteria instructions issued by the ETVET council is represented by 4 out of 6 members of the financing committee. The committee controls projects financing requests through providing its recommendations to the ETVET council for the final decisions.

In addition, the private sector according to CAQA by law No. 35, year 2012 is represented in its steering committee by two members out of the 9-committee members. The two private sector members according to the aforementioned by law are selected by the minister of labour.

VTC Law No. 11 of 1985 and its amendment:

According to the law, five members out of the 11VTC Board of Directors members i.e. about 45% are representing private sector and civil society institutions. The board is chaired by the minister of labour, and its main responsibilities include identifying/preparing general policies and strategies, training plans, programmes and levels, training needs and work instructions for VTC. Accordingly, private sector through its members in the board of director can play a role in the governance of VTC.

In addition, VTC law identified apprenticeship scheme as one of patterns used in implementing its training programmes, which require close cooperation and partnership with private sector. Special instructions were issued by VTC to organize implementation of its training programmes

that include among other aspects, the apprenticeship scheme agreements/contracts between different stakeholders (VTC institute, employers and trainees) complete with each party roles and responsibilities.

TVET institutions and providers

Main providers of technical and vocational education and training programmes in Jordan are: Ministry of Education (MOE), Vocational Training Corporation (VTC) and BAU community colleges.

> MOE

Vocational education in MOE is managed by the vocational education and production department in the ministry. Vocational education is provided through 23 specialized vocational education schools in Jordan as well as in 187 general comprehensive education schools that provide vocational education together with general education stream within its premises (MOE, Education Strategic Plan 2018-2022). Students join vocational secondary sit for the national general secondary certificate exams (Tawjihy). Vocational students looking to continue their higher education at universities or community colleges are required to follow specific study plan that include additional topics (mathematics and physics). However, this is about to change since the study plan will be the same for all vocational education students in specific areas according to their vocational education branch (meeting with DG of VE/MOE).

All teaching/learning/training activities including both theoretical and practical parts of vocational education programmes in MOE are conducted within the equipped vocational schools. Vocational education students in MOE schools are required to practice their specialization for 24 days either in work places in labour market or in their schools workshops during summer holiday.

Comprehensive secondary vocational education stream provided by MOE schools includes the following branches:

- Industrial Education
- Agriculture Education
- Hotel and Tourism Education
- Home Economics Education (This branch was moved in 2016/2017 to the applied secondary vocational education stream that does not end with the general secondary certificate exam-Tawjihi)

> VTC

Vocational training Corporation is a governmental institution, semi-autonomous governed by a board of directors comprised of representatives of government, civil sector organizations and private sector. The board is headed by the minister of labour.

According to its law No 11 of 1985, VTC is mandated with:

- Providing vocational training opportunities to prepare the technical workforce and raising its level of efficiency in the various non-academic vocational training levels and specializations, and working on diversifying vocational training, inclusive of:
 - 1. Vocational apprenticeship that allows the young and adults to undertake long-term organized training.
 - 2. The training of institutions' employees in specialized training centers and in their work locations in order to raise their level of efficiency.

- 3. Extensive and speedy training for various professions.
- 4. Training in the fields of occupational safety and health.
- Providing supporting guidance services for the establishment and development of small and medium enterprises (Currently not effective).
- Regulating the practice of occupations in labour market by classifying working sites and workers therein.

To understand the role of VTC in vocational training and workforce development in Jordan, it has to be mentioned that the occupational skill levels currently adopted in Jordan is comprised of 5 categories/levels: semi-skilled, skilled, craftsman, technician and proffessional levels. VTC main role is to prepare workforce in the three basic occupational levels (semi-skilled, skilled and craftsman levels through its vocational training programmes.

In addition to the training programmes conducted by VTC for durations usually range between several hundreds hours to two years that lead to prepare WF in different occupational sectors at the three basic levels (in some cases to technician level in cooperation with BAU), VTC also conducts upgrading and continouse training courses targeting already employed workers and other society members in general.

Training programmes are covering dfferent occupational areas particularly in the industrial and service sectors. For implementing its training programmes, VTC has 42 vocational training istitutes spread all over Jordan, and the training programmes are mostly implemented in cooperation with work places and companies in labour market through applying apprenticeship and other work based training patterns.

Balqa Applied University/Community Colleges (BAU/CC)

BAU is the main provider of technical education in Jordan through its colleges in different areas of Jordan. It has 13 colleges under its direct authority, while supervising technically other 28 community colleges belong to the private sector, United Nations Relief and Works Agency for Palestine Refugees (UNRWA), military and other governmental institutions/ministries.In addition to the main (2-3) years technical education programme, BAU/CC provides short term training courses for individuals to develop their skills.

Technical education programmes in BAU colleges are covering many occupational fields including but not limited to: Electrical works, automotive, air conditioning, plumbing and central heating, machining, computer maintenance, smart phones, dress making, ceramic crafts, chemical products and agriculture (Rawashdeh/UNESCO, 2018).

In addition to the main TVET providers mentioned above, other institutions are providing TVET programmes in Jordan but at lower scales in regard to numbers of trainees such as the National Employment and Training Company (NET), UNRWA and Al Hussein Technical University.

National Employment and Training Company (NET)

In 2008, the Army established The National Company for Employment and Training (NET), and it is currently owned by both the Army and VTC. When established, NET was aiming mainly at training unemployed Jordanian youth in construction occupations to respond to LM needs. However, it is currently providing training in other areas such as mechanical maintenance, furniture carpentry, solar energy and auto electrician in addition to hairdressing and beatification and dressmaking training for female.

NET implements its training programmes in both training institutes and in workplaces. Duration of the applied training programmes for different specializations is 8 months.

United Nations Relief and Works Agency (UNRWA)

Two UNRWA training colleges (Wadi Elsear and Naour) provide vocational training for those who completed 10thgrade successfully within the applied secondary education stream. The training is open only for Palestinian refugees and the number of trainees is limited (Rawashdeh/UNESCO, 2018).

Al Hussein Technical University (HTU)

Al Hussein Technical University was established recently in 2016 by the Crown Prince Foundation. In addition to the Bachelor Degree, HTU provides technical education programmes of 2/3 years for students who successfully passed the general secondary certificate exams.

Companies and Labour Market institutions

Jordan's labour market is largely dominated by micro enterprises (less than 5 employees). By the end of 2015, micro enterprises formed 89.3% of total number of enterprises, small (5-19): 8.7%, medium (20-99): 1.6% and large enterprises (100 and more): 0.4%. The total number of micro, small, and medium enterprises in 2015 was 187018 representing more than 99% of the 187,645 working enterprises in Jordan. The number of employed workers in micro, small, and medium enterprises was 525,646 forming about 71% of the 741,517 employees working in all enterprises, while the number of employed workers in large enterprises was 215,871 forming about 29% the total employed workers in enterprises (Aqel and others, JEDCO, 2017).

Employers organizations particularly in developed countries are the key labour market institutions partners in TVET due to their main role in the process of training needs identification, provision of work based training and employment opportunities and financial support for training.

In Jordan, the main employers' organizations are:

Chambers of Commerce

Number of commerce chambers in Jordan is 16 distributed in different cities/areas in Jordan. It operates under the temporary law No. 70 of 2003 and by law No. 45 of 2009. According to the mentioned law and by law, registration and membership in the nearby chamber of commerce is mandatory for enterprises of different sizes (small to large) working in different trade sectors including food, electricity and electronics, clothing, jewelry and novelties, health and medications, construction materials, cars and heavy vehicles, finance and banking, furniture and stationary, ICT and services, and consultancy sectors.

The funding sources for chambers are membership, certification, arbitration, and financial investments.

The Jordan chamber of commerce (JCC) represents all chambers of commerce and trade sectors in Jordan.

Chambers of Industry

There are four Chambers of industry in Jordan: Amman, Zarqa, Irbid, and the **Jordan chamber** of industry (JCI). It operates under law No. 10 of 2005 and by law No. 56 of 2005. According to the mentioned law and by law, registration and membership in the nearby chamber of industry

is mandatory for large enterprises and small crafts shops, and no industry and crafts works enterprise can receive a license unless it is a member of the chamber of industry in its city/area and pays its annual membership fees.

Funding sources for chambers are membership, certification, arbitration, and financial investment.

Employers' Associations and Unions

There are more than 50 employers' associations/unions in Jordan in different sectors including but not limited to: industry, ICT, tourism, banking, agriculture, trades, hospitals and health care, crafts professions and shops, and transportation and distribution. Employers' associations and unions are established and operated according to different laws depending on their field of work like associations, tourism, banks, ICT, and labour laws. Membership in some associations is mandatory while in others is voluntarily.

The revenue from employers' associations comes mainly from membership registration, members' annual fees, and provided services fees.

Employers' organizations in Jordan do not play a leading role in TVET in general and in apprenticeship/work-based training in particular as the case in other countries like Germany and Switzerland. However, chambers of commerce and/or industry have membership in the related TVET governance institutions, which enable them of playing some role in directing policies, strategies and plans of such institutions. In addition, some employers' associations have cooperation agreements in implementing training projects/initiatives with some ETVET institutions/projects.

Employees Organizations

Other key labour market institutions in Jordan are trade unions (workers organizations). Trade unions are established in accordance with article No. 97 of Jordan Labour Law No 8 of 1996. Number of trade unions in Jordan is 17 in different work sectors. Following are examples of trade unions with relatively high numbers of members:

- General trade union of land transport employees and mechanics,
- General trade union of workers in electricity,
- General trade union of workers in mining and metallurgy,
- General trade union of workers in petrochemicals,
- General trade union of workers in air transportation and tourism,
- General trade union of workers in textile, garment and clothing,
- Trade union of workers in banks, accounting and insurance (5000 members).

Trade unions in Jordan have **General Federation of Jordanian Trade Unions (GFJTU)**, which consists of 17 union members.

The role of trade unions in the TVET sector is limited mainly to their participation in the memberships of governance councils/board of directors of TVET sector institutions, which may give them some role in directing the sector's policies, strategies and plans (Guide to Civil Society Organizations in Jordan (http://www.civilsociety-jo.net/en/home).

Challenges and Constraints

PPP in ETVET sector in Jordan witnessed some progress through involvement of private sector in some governing bodies in TVET sector as well as in some partnerships initiatives/projects. However, many challenges and constraints are still facing ETVET sector and consequently hampering achievement of an effective and integrated partnership in the sector. Such challenges and constraints include:

- Insufficiency of laws and regulations required for providing appropriate legal environment for building effective partnership at different levels.
- Weak capacity of private sector and civil society institutions required for enabling them of playing key roles in TVET in partnership with public sector particularly in identifying training needs, developing occupational standards and learning materials and evaluation of training.
- Shortage of financial resources for funding PPPs initiatives/projects and for providing incentives to encourage the employers involvement in TVET activities including offering work based training opportunities, development of training curricula and learning materials and evaluating of trainees/graduates. However, even the extra resource available from ETVET Fund lacks strategic framework for distributing the available funding, it mostly spent on the supply side government training programmes instead of funding training according to private sector needs.
- Structure of labour market enterprises, where about 98% of enterprises in Jordan (less than 20 workers) are of small scale having 37% of all employment in private sector (NHRD strategy 2016-2025). Accordingly, their engagement capacity in different levels of partnership in TVET is limited and forms a challenge issue. Also, the size of informal sector which is estimated by the International Monetary Fund (IMF) in its last report "Regional Economic Outlook, Middle East and Central Asia" at 26% of Jordan's economy represents other constraint for PPP development (Social and Economic Council, 2012).
- The prevailing weak economic situation in Jordan after 2009, where the annual GDP growth is relatively low (about 2.5%) (Rawashdeh/UNESCO, 2018). This led to less development and expansion in business in general and consequently the ability of economic sector to generate new jobs. Such economic circumstances affect negatively willing of private sector to partnership in ETVET.
- Private sector employers' perspective on weak capabilities of TVET providers to cooperate and
 respond to their actual training needs. This perspective was developed along years of employers
 experience in receiving graduates not having the right competencies as required by labour
 market, which is a natural result due to the absence of coordination and cooperation between
 the two parties in regard to identifying training needs, developing curricula and learning
 materials and implementing of training programmes.
- The centralized management style applied in TVET providers' institutions in Jordan, which impedes training institutes at local level of developing and implementing training initiatives/projects/programmes in partnership with private sector.
- Insufficient interactive capabilities of the TVET institute/college required for establishing and promoting sound partnership relations with private sector companies at local level.

Funding

Funding of PPP initiatives/projects comes from public budget and ETVET Fund as main resources and from trainees' fees, private sector/employers and donors as secondary resources.

Apprenticeship training scheme applied in VTC in partnership with private sector workplaces (very rarely also in public sector work places) is mainly funded by VTC budget as part of the general governmental budget. Other additional, but minor funding resources come from trainees fees (very symbolic), sales of

training products and companies/employers contributions that include trainees allowances/wages, transportation and provided trainees' meals costs.

The 8 months training programmes conducted in both training institutes and private sector work places in NET is funded by ETVET Fund.

In addition, ETVET Fund with contributions from other financial resources coming from related stakeholders such as Royal Court, MOL, VTC, BAU and private sectors companies and social partners financed partnership projects/initiatives. Examples of such projects/initiatives include but not limited to: satellite factories project with Royal Court, MOL and companies and the Pharmaceutical MCoE with VTC and JAPM.

Table (4) shows allocation of E-TVET fund across beneficiaries for the period 2005-2015 (NHRD Strategy 2016-2025). As it can be seen from the table, the highest percentages of ETVET Fund allocation went to NET, MOL (mainly satellite factories project) and VTC. Allocation was not used only for covering training costs for partnership training activities but also supply side training courses, development of infrastructure (buildings, equipment, etc.) and other training and employment related activities. Worth mentioning here, that among main TVET providers both NET and VTC had got the highest percentage of finance from the ETVET Fund.

Institution	Allocated fund %
National Employment and Training Co. (NET)	44.8
Ministry of labour (MOL)	24.3
Vocational Training Corporation (VTC)	12.7
National Center for Human Resource Development (NCHRD)	6.4
Ministry of Municipal Affaires	2.4
All others	9.4
Total	100

Table 4. allocation of E-TVET fund across beneficiaries 2005-2015

Agreements between relevant stakeholders in the scope of PPP (ministries, chambers, federations, trade unions,...etc.)

According to VTC training programmes instructions, companies/employers have to sign agreements with VTC for implementing apprenticeship training in addition to training contracts with trainees/apprentices.

However, such agreements with companies are usually signed with large scale ones on individual basis (separated agreement with each individual company). Agreements specify responsibilities of both sides including allowances/wages to be paid by the employer to trainees. Trainees allowance is usually very small (pocket money) and paid during the specialized training stage, while the wage during the work experience stage is supposed to be similar to the peer workers.

For the majority of trainees, particularly those in SMEs, no official training agreements or contracts are signed with employers but relevant parties have verbal/undocumented agreement/commitment.

In some cases, VTC had also signed agreements with employers associations for partnership in implementing different types of training programmes and other related activities.

Following are examples of agreements signed by VTC with private sector partners (associations/companies):

- Jordan Hotels Association for implementing apprenticeship training in hospitality fields, where association's members provide work-based training for apprentices.
- Jordanian Association of Pharmaceutical Manufacturing (JAPM) for the establishment and management of a Pharmaceutical Center of Excellence. According to the agreement, JAPM involvement included developing related training curricula, management of the institute, and provision of work-based training and employment opportunities for trainees and graduates available in its members companies.
- Zain Communication Company for training on cellular phones maintenance. The company after renovating and equipping one of the workshops in the Jordan-Korean vocational training institute is delivering the cellular phones maintenance training courses for enrolled participants.

In 2017, and upon cabinet approval, MOU was signed between VTC and Jordan Chamber of Industry that enable the chamber of operating and management of 4 VTC vocational training workshops/sites in the areas of printing, chemical industries, wood working/furniture and leather works. The signed MOU is not activated so far due to financial constraints. However, the chamber with support from GIZ project in Jordan is about to start operating wood working workshop as a pilot that can be used as a model to encourage chamber's members of providing required financial support if successful.(Interviews with ADG for training affaires in VTC and projects coordinator in JCI).

In regard to NET Company, and for implementing the work-based part of its training programmes in companies, agreements are usually signed with partner companies.

BAU has already about 25 agreements with private sectors. Most of these agreements aim at providing on job training opportunities for the diploma community colleges students. The on job training will be for one semester during summer for the 2 years diploma students and 2 semesters (one of them during summer) for the 3 years diploma students. Agreements cover training areas, payments for students (pocket money) and follow up of training). In addition, other signed agreements include involvement of private sector in developing study plans, provision of business incubators, and participation of experts from private sector in delivering training in specific topics and employment of graduates. Examples of signed agreements with companies/institutions from private sector include but not limited to: Agreement with Orange Jordan/communication co., AIAL Emlaq/Giant Industrial Group (chemical industries), and association of employers in mechanical occupations and Amman chamber of industry. Other example of partnership agreement was the one signed between Al Husun community college with CCC/MORGANTI and SABEQ/USAID project according to which a training programme titled pipe supervisor was started in 2009 and still operated (Meeting with BAU vice president).

Cooperation with private sector is very limited in vocational education in MOE since both theoretical and practical training is implemented within the school's premises, and even the summer training for the vocational students is implemented mainly in vocational schools. However, and in line with its strategic plan (2018 - 2022) concerning establishment of effective partnership with private sector in vocational education, MOE signed on 20/12/2018 an agreement with Amman chamber of industry. The agreement included mainly cooperation and coordination between the two partners in regard to financing trades skills competitions, providing training/employment opportunities for students/graduates, conducting studies on needs assessment of VE graduates and establishing twinning and partnerships between vocational schools and industrial companies. Other two agreements are currently still in the development stage and expected to be signed in the near future. The first

agreement with Jordan Industrial Estates Company (JIEC), and the second one with hotels association (meeting with Director General of VE department/MOE).

Training/employment partnership projects/initiatives launched by other institutions outside the TVET providers are organized and implemented according to signed agreements between involved partners. Examples of such agreements include those between MOL and relevant companies/employers association for training and employment of UN employed youth in specific sectors such as garments, furniture, gas sale stations and others.

ETVET Fund signs agreements when financing training projects/initiatives with related implementers of these projects/initiatives. Agreements details mainly contributions and responsibilities of the Fund and the beneficiary partner as well as payments and performance conditions/indicators.

Quality Assurance of PPP in TVET

Quality assurance of PPP projects/initiatives in TVET in Jordan is still mainly the responsibility of TVET providers and related public sector institutions. Private sector role in quality assurance depends on their involvement of TVET, which is still not effective as required, and can be observed to some extent more at policy level (councils, boards and committees) and not at planning, implementing and evaluating levels.

In the apprenticeship scheme, the main training programme implemented by VTC in partnership with private sector, quality assurance activities embedded within the system include:

 Use of a logbook for each apprentice/trainee to monitor and document his progress in acquiring the programmes' predesigned training elements (see annex 2). Training elements listed in the logbook are those to be acquired through on job (in work place) and off job (in the vocational institute) training. For each training element there are three levels of actions/performance to be checked and signed by the supervising trainer when fulfilled (1- received training, 2performs under supervision and 3- performs independently).

A shortcoming of applying the logbook that it is totally filled by the responsible trainer/training officer from VTC even for training takes place in companies. Employers/workplace supervisor has no role in filling the logbook. This shortcoming is obvious, when taking in consideration that field visits to trainees in workplaces by supervising trainers/training officers take place once a month at most.

- Use of a trainee book, where each trainee is required to summarize the technical training he
 had received including theoretical and practical during the off/on- job training. Both, trainers
 and employers/work place technicians are required to review and provide feedback comments
 or approve the contents written by apprentices on regular basis. Involvement of the
 employer/technician here is concerned only with technical content related to practical
 work/training conducted within work places.
- Formative tests (theoretical and practical) are applied to provide feedback on apprentices' progress and consequently taking necessary measures as required. In addition, and upon completion of the apprenticeship training programmes, apprentices are required to undertake a final occupational level test to obtain a training certificate together with the related occupational level. The final occupational level test covering both theoretical and practical parts is developed by the curricula and testing directorate in VTC through subjects experts either from inside or outside VTC. Final tests are unified for all VTC vocational institutes, and are conducted by each institute's staff without involvement of the private sector.

The center of accreditation and quality assurance (CAQA) accredits VTC training programmes and issues occupational licenses in coordination with the VTC training institutes.

• Follow up and evaluation of the training process by the quality control directorate in VTC. Quality control coordinators conduct periodic field visits to the training institutes to ensure quality implementation of the training programmes including apprenticeship scheme as required.

In NET work-based training programmes, trainees take tests during their off job training in the institute/center. Training staff develop the tests to cover both theoretical knowledge and practical skills. During the on Job (in company), training field visits by NET's trainers are conducted on regular basis to trainees to check their discipline and training and accordingly take required measures.

NET training programmes as in VTC are accredited by CAQA. Upon the successful completion of the training programme requirements, training certificates are issued by NET for graduates, and accordingly, graduates from the NET training programmes obtain an occupational work license issued by CAQA.

For other partnership initiatives in TVET, signed agreements form references and include required checks/follow up activities to be applied to ensure quality implementation towards achieving the set objectives. Partners in TVET initiatives/projects funded by ETVET Fund are usually requested to develop periodic and final reports detailing activities conducted and progress achieved according to the project plan and objectives. ETVET staff is required to follow up and evaluate quality implementation through reviewing developed reports and field visits to the training/working sites.

Tools and guidelines

Tools and guidelines for the implementation and development of PPP in TVET in Jordan include:

- Political well towards effective involvement of private sector which was clearly indicated in related policy papers adopted by Jordan sequenced governments during the last few years just as NHRDS (2016-2025) and NES (2011- 2020).
- Availability of legislative tool for applying PPP, although not providing a comprehensive framework for effective partnership at different levels and systems of TVET, but still allows for private sector involvement in TVET at both governance and implementation levels. ETVET Council Law No. 46 of 2008 and VTC Law No. 11 of 1985 imposed private sector representation in the governing council/board of directors responsible for policy planning and governance in those two ETVET institutions. In addition, Labour law No. 8 of 1996 and VTC law pointed out to the possibility of implementing vocational training through apprenticeship scheme and work based training, which requires private sector involvement and cooperation.
- However, although legislative tool is necessary to build partnership, but still not sufficient to
 increase and develop effective employers involvement in TVET. It is critical that employers
 understand the benefits to their enterprises of creating a demand driven system. In addition,
 private sector representatives in TVET institutions partnering councils, boards and committees
 should have the interest, authority and qualifications for effective participation and
 consequently directing TVET more towards demand led system.
- Establishment of private sector led sector skills councils (SSCs) by ETVET council where the majority of its members and their chairs are from private sector. SSCs are considered as good tools for the effective involvement of private sector particularly in identifying training needs and occupational standards critical for establishing demand driven TVET system. So far, the established SSCs were supported by international donors/organizations (ILO, GIZ and EDB).

Therefore, a question is raised about the sustainability of SSCs when the provided support is ended if SSCs were not institutionalized within the TVET system.

- Adoption of the National Qualifications Framework (NQF) in Jordan. By law No. 9 of 2019 for the NQF was approved by the cabinet on 16/1/2019.NQF is expected to be a further tool for promoting more involvement of private sector representatives in TVET particularly through their contribution and partnership in identifying sectors needs and identifying related standards and qualifications.
- Apprenticeship training scheme/work based training applied by VTC and NET. Training here is
 implemented in training institutes and work places/companies, which strengthen the
 employers involvement and accordingly partnership in developing trainees skills and
 competencies according to actual needs of the labour market. However, involvement of
 employers in the in company training still needs to be improved and strengthened through
 developing capacity of company supervisors/technicians responsible for trainees training to
 become qualified in company instructors in order to provide more systematic on job training as
 well as participating in assessing and testing of trainees progress in acquiring required skills and
 competencies.
- Establishment of ETVET Fund, which promoted private sector contribution in funding TVET in Jordan. ETVET Fund resources based mainly on private sector financial contribution coming from the 1% levy on the company's net profit and fees for issuing annual work permits for foreign workers in the private sector (the 1% levy was cancelled in 2010). Involvement of private sector in financing TVET developed the private sector institutions/company's interest in vocational training, and consequently encouraged more involvement in planning and implementation of training projects/initiatives in partnership with TVET providers.

Initiatives and projects: Work Based Learning, Apprenticeship Training Schemes, Dual Studies Programmes

• Vocational training initiatives/projects conducted in partnership with private sector

> Apprenticeship training scheme

Formal apprenticeship training was introduced for the first time in Jordan in 1977 by VTC. According to its law No 11 of 1985, VTC is mandated with implementing apprenticeship training for youth and adults in Jordan. Applying apprenticeship demanded private sector cooperation and partnership particularly in implementing the in company/on job training part of the programme. Apprenticeship training scheme in VTC is used to prepare workforce at semi-skilled, skilled and craftsman levels according to the Arab Standard Classification of Occupations (ASCO 2008).

Apprenticeship training programmes conducted in VTC cover a wide range of occupations such as welding and metal fabrication, electricity, electronics, automotive maintenance, air conditioning, refrigeration, woodworking and upholstery, garment industry, printing and binding and food production in the industry sector. In the service sector, apprenticeship programmes are conducted in hospitality, hairdressing and beatification and office jobs.

Students within ages of 16-19 are more likely to join the three-apprenticeship training programmes levels. In some cases, older individuals may join programmes. Pre entry requirements and durations vary according to the training programme skill level (semi-skilled, skilled and craftsman) as it can be seen in table (5).

Training programme level	Duration (semester = 700 actual training hours)	Entry requirements
Semi-skilled	Up to 1 semester	Literacy (ability to read and write).Age not less than 16 years old.
Skilled	2-4 semesters according to specialty.	Successful completion of the basic education.Age not less than 16 years old.
Craftsman	2-4 semesters according to specialty.	 Completion of the 2nd secondary grade. Trainees ages usually not less than 17 years old.

Table E. Appropriationship training	- durations and anti-	, roquiromonto occor	ling to programmas lovals
Table 5. Apprenticeship training	g durations and entr	y requirements accord	ang to programmes levels.

According to VTC training programmes' instructions, apprenticeship-training programmes are implemented through the following three stages:

- 1. General basic training stage of maximum 100 hours (vocational theory and practical training), conducted within the training center/institute, noting here that the semi-skilled training programme is exempted from this stage.
- 2. Specialized training stage, where training alternates between one week at the training institute for vocational theory and practical exercises and one week in the workplace for actual work training. Duration of this stage varies according to the specialization.
- 3. Work experience stage, which takes place completely in work, sites in companies. Duration of this stage varies according to the specialization.
- 4. Practical training percentage varies according to the training programme: 50-60% in the craftsman level, 60-70% in skilled, and 80-90% in semi-skilled worker levels training programmes.

In addition to the theoretical and practical components of training, apprentices receive 200 actual training hours on life, entrepreneurship and self-employment skills during their off job training in the vocational institutes.

Upon completion of the apprenticeship training programmes, trainees are required to undertake final occupational level tests to get training certificates together with the related occupational level. For accredited VTC training programmes, VTC training institutes are authorized by the Center of Accreditation and Quality Assurance (CAQA) to issue relevant work licenses for graduates(Rawashdeh/UNESCO, 2018).

Pathway for the apprenticeship trainees is open to join upgrading training courses organized by VTC to move to higher occupational level providing meeting the required conditions for work experience (1 year work experience for the certified semi-skilled to join the skilled worker level upgrading training course, and 2 years for the certified skilled worker to join the craftsman upgrading training course). Apprentices have to pass the general secondary education certificate exams (Tawjihi) in order to join higher education to get the comprehensive technical diploma in community colleges or the university degree.

For implementing its apprenticeship and other training programmes, VTC cooperates with about 2400 enterprises ranging between micro enterprises of less than five employees up to large-scale ones with hundreds of employees like the potash, bromine and electricity companies (VTC employers guidebook 2017). In addition to private sector enterprises, VTC implements apprenticeship-training programmes with public sector institutions such as the Amman municipality and the water authority (Rawashdeh/UNESCO, 2018).

> NET initiative for vocational training programmes in vocational institutes and work places

This initiative was launched by NET when established in 2008. Training programmes are conducted in cooperation between NET and private sector companies/employers. The training duration for all specialties (construction and other occupations) is 8 months. It consists of 1 month for national/military training, 4 months of vocational training in the institute for construction occupations (5 months for other occupations) and 3 months' in companies/work places training for construction (2 months for others).

Training in vocational institutes lasts for 4/5 months includes both technical theory and practical training of the related specialty, while during the 3/2 months in companies/workplaces, trainees practice actual works in labour market. On Job training in work places is monitored by NET trainers through periodic field visits.

Training in NET is open for literate youth (able to read and write). Ages of trainees range from 17 to 29 years old. They get 75 JD monthly for personal expenses and transportation cost during the training. In addition, they get a work uniform, personal safety equipment, health care, and insurance for work accidents. Upon successful completion of the training, graduates get a training certificate from NET as well as a work license issued by the Center for Accreditation & Quality Assurance (CAQA).

> The new initiative for the work based training in BAU/AI Salt Technical College

Salt Technical College started its work in BAU in the first semester 2018/2019. Programmes to be offered by the college include water treatment engineering, energy engineering, intelligent buildings engineering, intelligent systems engineering and artificial intelligence engineering and robotics. The duration of these programmes is three years for the associate degree and two years for the technical diploma, which is characterized by technical education in the college and practical training in the labour market work sites through active partnerships with the private sector and within a training educational system to qualify graduates to achieve jobs that fit the acquired skills (https://www.bau.edu.jo).

Programmes currently run in the college are in two specialties: energy engineering and intelligent systems engineering with a total number of students of 33 in the two programmes who just started their 2nd semester in the college (meeting with BAU President Assistant).

The initiative of applying technical education programmes in partnership with private sector in Al Hussein Technical University (HTU)

Al Hussein Technical University implements its technical education programmes in the university campus as well as in companies through partnership with private sector as following (https://www.htu.edu.jo/):

- 1. Technician Degree: One and a half year studying in campus and 6 months' apprenticeship in industry.
- 2. Technical Degree: Two years studying in campus and one-year apprenticeship in company training/employment initiatives/projects

• In company training/employment initiatives/projects

Those initiatives/projects may include two or more partners from public and private sectors. Participant's training is conducted mainly within enterprises/companies, and could be conditioned with employment opportunities for the participants upon completion of the training period. The main funding resource is coming from ETVET Fund. Examples of such initiatives/projects include but not limited to:

Satellite factories

As mentioned earlier, main partners in this initiative are NTEP/MOL, ETVET Fund, Royal Court, companies/investors and others. The targeted unemployed youth particularly females join the established factories; receive training usually provided by the company for the agreed upon jobs and appointed as regular workers in the factory.

Youth training and employment initiative in industry sector

This initiative was implemented by Jordan chamber of industry in partnership with Al Kinz Al Maknoun Establishment and the ETVET Fund as financing resource. It was conducted in 2016 and targeted UN employed youth (males and females). Participants training consisted of two parts: 1 month for soft skills training and 3 months in company for technical training. The training is required to be ended with employment opportunity in the company. Sectors targeted by the initiative included: marketing, garment, food production, printing and plastic industry (Omari, initiative annual report 2016).

> Training of fresh ICT graduates project

Partners are ministry of communications and information technology, INTAJ association, Jordan computers society (JCS), USAID economic development programme in Jordan (SABEQ) and ICT companies with financial support from ETVET Fund. The concept of the project is based on providing on job training for fresh graduates in ICT companies that end with employment opportunities in ICT companies (ETVET Fund annual report 2015).

LMIS and mismatch: Matching of Labour Market Needs

The National Electronic Employment System (NEES) is operated and maintained by MOL. It is an on-line platform to match job seekers and employers. Jordanian companies can register their available vacancies directly on line in the system with required qualification, work experience, age and gender as well as offered salaries and other incentives. None Jordanian companies need to register through employment offices in MOL. Job seekers can register directly on line or through employment offices with the support of a dedicated staff trained to use the system.

Few years ago, municipalities particularly in rural areas were equipped to enable local job seekers in the surrounding area of registering on NEES using the access available in the municipality with assistance from a special trained staff. However, this cooperation/partnership between MOL and municipalities are currently stopped (meeting with NEES section head/MOL).

Other services were initially planned to be provided through NEES that include: career guidance, sector l information and electronic/on line training but are not operational so far.

Even in its current situation, where NEES serves in registering job offers (for companies willing to) and job seekers (for those who are aware of), it may help in providing some signals of demanded skills in the labour market. On the other hand, activating of other services as the on-line career guidance system, sector information and electronic/on line training could increase the attractiveness and the effectiveness of the system and make it more widely used (ETF/TPR 2016-2017).

The National Center for Human Resources Development (NCHRD) on behalf of MOL and with finance from ETVET Fund is conducting national sector studies that cover both demand side (numbers and skills) and supply side provided by TVET institutions. Survey studies cover priority sectors as identified by ETVET Council.

Studies are conducted in cooperation with Department of Statistics (DOS). Members from private sector representing the studied sector participate in the study sector team and advisory committee together with members from the related public institutions.

Number of survey studies conducted during the period (2013 - 2017) was 15 studies in priority sectors shown in annex (3).

There is no evidence that training providers such as the VTC, the community colleges or the vocational education schools have adapted their curricula or their provision to the results and recommendations of these studies (ETF/TPR 2016-2017).

In addition, NCHRD through Al Manar project publish on its website HRI statistics that consist of two parts. The first part is the Education Database, which includes information about students and graduates of education institutions in Jordan including TVET providers (NET, VTC, VE/MOE and community colleges). The second part is he Labour Force Database which includes in particular data about employed, unemployed and licensed foreign workers.

The Role of NQF and accreditation agencies in the PPP- TVET in your country

The process for establishing a National Qualifications Framework in Jordan was started on 27 January 2017, when the Cabinet formed a national committee for developing a National Qualifications Framework proposal. The committee was formed of 18 members and headed by the president of the Accreditation and Quality Assurance Commission for Higher Education Institutions (AQACHEI). Members came from ministries (MoHESR: 2, MOE: 2, MOL/CAQA: 1, MOPIC: 1), Universities: 4, VTC: 1, AQACHEI: 2, CSB (Civil Service Bureau): 1, NCHRD: 1 and private sector institutions (Amman Chamber of Industry: 1 and Jordan Engineers Association (JEA): 2) (AQACHEI, 2017). The Cabinet adopted the National Qualifications Framework in August 2017, and the related by law No. 9 year 2019 was approved by the Cabinet on 16/1/2019. As it can be seen from the formation of the committee tasked with developing the NQF proposal in Jordan, social partners were represented by 3 out of 18 members only.

According to its by law, NQF in Jordan is comprised of 10 levels covering higher education, general education and technical and vocational education and training qualifications from level 1 (kindergarten or its equivalent of un skilled qualifications achieved by experience) up to level 10 (PHD and its equivalent of qualifications achieved by pre learning).

It is still early in this stage to assess the role of NQF in developing PPP in Jordan. However, based on other countries experience in applying NQF, concrete impact of NQFs can be observed on: increased social dialogue, relevance of qualifications, recognition of informal learning, reformulation of study programmes and certification procedures and transparency of qualifications and their international comparability (ETF, 2018 updates).

When established in 2007 according to law No. (20) AQACHEI name was Higher Education Institutions Accreditation Commission (HEAC), and it was attached to the minister of Higher Education and Scientific Research. In 2009, it became independent and directly attached to the prime minister. It was in 2016 when the Commission role was expanded to include the "Quality Assurance" and consequently got its current name (AQACHEI).

Among other responsibilities, AQACHEI is mandated with developing accreditation and quality control criteria and accrediting higher education institutions and their programmes. This covers technical

education programmes of not less than one-year duration provided by private and public community colleges in Jordan for students after the general secondary certificate. Therefore, AQACHEI law allows for accrediting technical education programmes within TVET sector that conducted through partnership between TVET providers and the private sector using the apprenticeship and internship schemes such as those new technical education programmes in HTU and Al Salt Technical College in BAU (HEAC law 2007).

The Center of Accreditation and Quality Assurance (CAQA) was established in 2012 according to by law No. 35. It works under the umbrella of the ETVET Council, and mandated with the following main responsibilities in regard to licensing/accrediting VET institutions/programmes in private and public sector in Jordan:

- To prepare and develop TVET standards so as to assure the quality of a sector's outputs, which will be accredited later by the ETVET Council;
- To license and accredit TVET institutions;
- To conduct vocational tests and issue practicing licenses for workers.

Based on CAQA' by law, private sector TVET institutions are required to apply to CAQA to license and accredit their training institutions and programmes and accordingly get work licenses for graduates before operating, and applying the programmes. Accreditations of TVET institutes/programmes require achieving specific criteria identified by CAQA regulations.

Thus, training programmes/schemes implemented through partnership between VET providers and private sector can be accredited by CAQA, and work licenses specifying occupational level issued for their graduates.

For workers who gained their technical related knowledge and skills through informal training in companies, they can sit for occupational tests organized/oversight by CAQA to be classified and certified as semi-skilled, skilled or craftsman level. In addition, CAQA conducts tests for graduates of accredited training programmes implemented by private sector training institutes for certifying graduates in specific areas such as safety officers and vocational trainers, which enable them to work in private sector companies.

According to NQF by law, TVET qualifications awarding institutions are required to apply their requests for institutional registrations/inclusions to CAQA. In addition, in order to place their awarded qualifications in the framework, they are required to apply to AQACHEI through CAQA.

Proposed PPP model for Jordan

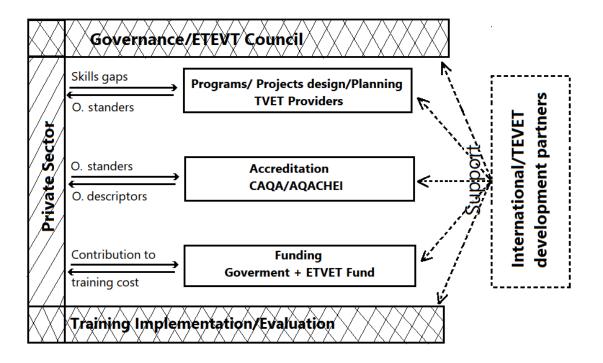
Proposed PPP model for TVET in Jordan should include effective involvement of private sector in TVET in regard to governance, design and planning, accreditation, funding, implementation and evaluation of training programmes/projects.

As mentioned earlier in this report, recent national policies documents included strategic objectives for developing PPP in TVET in Jordan. In addition, related stakeholders are supporting PPP in different sectors including TVET and consequently some progress have been achieved in the last few years in this direction. However, constraints are still encountering developing effective partnership in TVET sector in Jordan such as: Lack of awareness and experience of both public and private sectors institutions in regard to the importance and how to establish partnership and cooperation links in TVET, insufficient capacity of private sector institutions that enable effective involvement in TVET sector, shortage of

funding resources, un willingness of private sector to invest in vocational training may be due lack of trust in TVET providers outcomes, high percentage of micro and small enterprises in the labour market and the centralization management style which does not allow establishing partnership agreements directly between TVET institutes at local levels with private sector companies without going through the H.Qs.

Due to those circumstances and for this stage, the proposed model to promote PPP in Jordan has to include external assistance from international development donors to support the gradual and progressing involvement of private sector in TVET.

The following chart shows the proposed model by the author for PPP in TVET in Jordan.



AS illustrated in the chart, involvement of private sector has to be integrated in different levels of TVET from governance to implementation at local TVET institutes:

- At the governance level, private sector has to be fully engaged in identifying ETVET policies, strategies, planning and coordination among different stakeholders in the sector at national level through their members in the ETVET council and other TVET providers councils/board of directors as required. Members representing private sector should be selected by the sector from those having the required experience and capacity for effective participation in the council.
- At the level of designing and planning PPP programmes/projects, private sector has to be interacting actively with TVET providers particularly in identifying skills gaps/training needs and occupational standards required for the design and planning of training programmes /projects that meet industry needs. This can be done through the established sector skills councils.
- At training programmes accreditation level, private sector has to interact with the accreditation/awarding bodies (CAQA/AQACHEI) regarding occupational standards and descriptors.
- At funding level, private sector contribution could include covering costs of initial/continuous training for new/already employed workers, apprentices' allowances, transportation and meals

cost for trainees (if provided) and equipment and raw materials provided for training and in company instructors.

 At the implementation level, private sector has to be fully engaged in the implementation of the training programmes through providing on job training for trainees, monitoring and evaluating on job training, providing experienced technicians/engineers for delivering training in specific topics in TVET institutes as required, participating in the final performance tests for trainees before graduation and providing jobs opportunities for graduates according to companies' needs.

Proposed support of international donors/TVET development partners in this model is provisional. It is needed in this stage to build the capacity for establishing and institutionalizing partnerships among different stakeholders in TVET in Jordan through transferring advanced countries experiences in this regard. Involvement of international partners has to cover different levels of partnerships in TVET and to insure sustainability and progress of partnerships after the international assistance is ended.

Conclusions and Recommendations

Conclusions

The main conclusions resulting from studying the current status and future trends and plans of PPP in TVET in Jordan can be summarized as follows:

- All stakeholders, particularly concerned government, TVET providers and private sector institutions realize the importance of PPP in developing effective TVET that meet actual labour market needs. This was explicitly indicated in almost all related national strategies developed recently, such as the NHRDS (2016-2025), which stressed the role and involvement of the private sector in TVET governance, planning, funding, implementation and evaluation.
- Current legislation framework is not adequate for establishing an effective PPP in TVET in Jordan, although some promising steps were taken recently in this direction as the issuance of a NQF by law and the approval of the new Skills Development Corporation (SDC) law by the parliament (still not acting until issued in the official magazine). This is expected to garner more involvement of the private sector in TVET in policymaking, strategic planning, needs identification and occupational standards development. However, further development/modifications on related legislations are required to promote PPP in TVET, in areas such as funding regulations of PPP initiatives/projects, decentralization of TVET institutes at local level for direct cooperation with the private sector and expanding of the dual system/apprenticeship training to other TVET levels/institutions.
- Inadequate and to some extent ineffective representation of the private sector in the governance bodies of the TVET sector at national level (councils/boards of directors/trustees). Also at the local/implementation levels in the governance/management of TVET institutes, it is either not existing or inactive.
- Private sector contribution in funding TVET in general and PPP initiatives/activities in particular
 is still limited since no levies system/tax incentives are applied in Jordan. Financing of TVET/PPPs
 comes mainly from the public budget and the additional financial resources from the ETVET
 Fund. The Fund depends solely on deducting 100 JD from each foreign worker's annual work
 permit contradicts with the national strategic objective for nationalizing the workforce in Jordan
 and hence, raises a question about its sustainability.
- Adopted criteria for approval of financing applications by the ETVET Fund are general and do
 not promote or give priority to partnership projects/initiatives in TVET. Therefore, funding may
 cover training and other activities not necessarily linked with employment opportunities or
 implemented by accredited training providers as well as financing the supply side expenses such
 as salaries of new employees, constructions works, equipment and maintenance.
- Employers institutions lack the capacity for effective participation and involvement in TVET. In addition, employers/companies are reluctant in investing in workforce training particularly in partnership with TVET providers, which may be due to a lack of trust in training institutes' abilities to provide the required training.
- PPPs initiatives in TVET, implemented in the last decade, with involvement of an international partner proved to be successful. Examples of such PPPs are: Employer-specific training programmes in Al-Huson University College/BAU, model skill center of excellence in pharmaceutical and sector skills councils.
- Increased interest in applying apprenticeship/dual training in technician level education programmes. Both Al Hussein Technical University and Al Salt Technical College/BAU introduced 1-2 semesters on job training in their 2-3 years diploma/technician education programmes.
- In company, training is encountering some shortcomings that may limit achieving its planned objectives. These include but are not limited to: Domination of micro and small enterprises in

the labour market, which have weak capacity to provide the required training, training on daily regular tasks which could be repeated and not covering required training elements and the unavailability of qualified in company instructors.

- The long work experience in applying apprenticeship training of VTC in partnership with labour market work places/companies (since 1976) for preparing workforce at semi-skilled, skilled and craftsman levels is very rich. It can be studied and adapted as required for expanding apprenticeship to cover technician level in community colleges and vocational education in MOE.
- TVET institutes at local levels have no or little authority for establishing and implementing partnerships with employers and other social partners in surrounding areas. Such PPPs agreements need to be approved/signed by the central HQ departments. On the other hand, management staff in those TVET institutes lack the interactive abilities needed for marketing the institute's services and establishing PPPs.

Recommendations

The following are recommendations for strengthening partnership and involvement of the private sector and social partners in TVET at governance, funding and implementation levels in Jordan:

- Modifying related laws, by laws and regulations to increase percentage of private sector and social partner representatives in governance bodies of TVET sector institutions (ETVET council, TVET institutions' board of directors/councils/committees, CAQA steering committee...etc.) to not less than 50%. This is expected to further activating their role and partnership in TVET.
- Identifying specific criteria for nominating private sector representatives in the governance bodies' councils/committees to ensure having required qualification, experience and interest for effective participation and representing private sector needs and vision. Nominating of those representatives has to be by private sector institutions according to the identified specific criteria.
- Establishing/strengthening training units within employers and workers associations (JCI, JCC, JCCA, GFJTU, ...etc.) mandated mainly with developing and coordinating partnership links and activities in TVET.
- Capacity building of social partners' institutions to strengthen their role in TVET in Jordan. This
 requires involvement of international donor/development agency to facilitate knowledge and
 experience transfer from developed countries having successful PPPs experiences. In addition,
 to qualify a Jordanian institution/university to give practical support to capacity building among
 all the key stakeholders in the development of the TVET sector in general and PPPs in particular.
- Enhancing communication and interaction between private sector representatives in governance bodies and employers and workers associations (JCI, JCC, JCCA, GFJTU, ...etc.) as well as with individual members regarding TVET and partnerships issues. This can be done through using websites, Facebook and other forms of (social media) in addition to the traditional official reporting.
- Strengthening coordination among social partners through direct contact and communication particularly among private sector representatives in governance bodies as well as between training and development units/sections in social partners' institutions.
- Active involvement of social partners (employers and employees) in management of TVET institutes/schools/centers at local levels through establishing steering/advisory committees for those institutes. Such committees will support those TVET providers in different aspects including but not limited to: Development of annual work plans, provision of on job training and employment opportunities for trainees/graduates, evaluation of trainees' performance and Identifying new training areas to be applied in the institute/school/center according to the surrounding labour market needs.
- Delegating more authority to TVET providers (institutes/schools/colleges) for local management decisions that involve undertaking initiatives and forming local partnerships with private sector

companies in the surrounding areas (signing cooperation agreements, continuous and up grading training, on job training of trainers, etc.).

- Establishing partnership/marketing units in TVET institutions particularly at local levels with the
 responsibilities of marketing TVET programmes and partnerships with labour market companies and
 work places. The partnership/marketing unit will form a point of contact for the
 institute/school/college to which employers refer to for partnership in training and other
 cooperation activities.
- Developing interactive capabilities of TVET providers at local levels to form effective partnerships with industry and other stakeholders in the surrounding areas. Development of interactive capabilities includes: developing concerned staff (institute's principal, partnership/marketing staff, training supervisors/coordinators ...etc.) Competencies in interrelating with private sector and an interface structures (external and external) that facilitates interact and partner with other organizations and continuous development based on experiences accumulated.
- Studying expansion of work-based training/on job training models such as apprenticeship, internship and dual studies to different TVET providers in Jordan including the vocational education in MOE and community colleges in BAU.
- Modifying Labour law No 8 for year 1996 concerning organizing the in company training programmes and the forms and conditions of contracts between employers and trainees/employees to be determined by the related TVET provider institution and not limited to VTC as it is in the current acting law.
- Developing policies and taking measures as required by TVET sector institutions to organize informal apprenticeship in informal sectors of the economy, which currently lies outside the field of interest of mainstream government activity in the TVET sector.
- Adopting the concept of in company instructor with the mandate of providing on job training for apprentices/interns from TVET institutions as well as training of company's employees. In company, instructors are suggested to be selected from experienced technicians and prepared to become certified trainers/in company instructors through attending an accredited TOT programme.
- Strengthening companies' role in evaluating apprentices/intern's performance progress through entitling in-company instructors to fill trainees log books that reflect their progress in acquiring skills during their on-job training in companies.
- Applying industrial attachments for TVET institutions trainers/teachers on periodic basis as required for developing their practical skills as well as technical knowledge to cope with latest developments in the labour market.
- Revising current criteria for financing training projects/initiatives by ETVET Fund to include conditions promoting partnership between TVET providers and the world of work such as:
 - 1. ETVET fund financial support to be provided only to TVET institutes providing that the institutes and the implemented training programmes are licensed/accredited by CAQA.
 - 2. Supported training projects/initiatives to be linked with employment opportunities available in labour market enterprises.
 - 3. Training projects/initiatives to be planned, implemented and evaluated through partnership between TVET providers and employers associations/companies.
 - 4. Financing of training projects/initiatives to be based on performance criteria/indicators and such as numbers of graduates, certified and/or employed.
- Providing tax deduction for firms on the net cost of the approved training conducted as initial
 or continuous training for new employees/already employed workers. The deduction, which
 can be doubled on the net cost of training, is expected to act as an incentive for encouraging
 companies particularly the large-scale ones to partnership with TVET providers for training of
 their workers pre and during their employment.

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Other source of information came from interviews conducted by the author with different stakeholder's representatives as follows:

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Annexes

Annex 1: Model Skill Centre of Excellence for Pharmaceutical Sector in Jordan

Introduction

The Jordanian pharmaceutical sector is considered to be advanced and one-step ahead of regional competitors due to the sector's various strengths, which include availability of high-level professional local human resources and a favorable business environment.

The sector is positioned among the highest exporters in Jordan, where export of pharmaceutical medicines and products in Jordan was totaled at 467.7 million JD representing about 10.6% of the total products exports that equals to 4,396.6 million JD in 2016. Pharmaceutical medicines and products sales are concentrated in KSA, Algeria, Iraq and Sudan (Central Bank of Jordan Annual Report 2017).

Studies demonstrate that the sector plays an important role in resolving the country's unemployment problem with over 5,000 direct jobs and 8,000 indirect jobs in 2008.

Establishment of the CoE

Since the pharmaceutical sector was identified as one of priority economic sectors in Jordan, and in order to meet the need of the pharmaceutical industries for skilled workers at operational level, VTC established the center in 2014 using an available building in one of its existing training institutes in Salt city in the middle region of Jordan.

> Partners and their roles

The center was established through partnership between VTC and Jordan Association of Pharmaceutical Products (JAPM) and with support from both the European Union and the ETVET Fund.

> VTC

In addition to providing buildings and technical and administrative staff, VTC is planning, implementing, managing and evaluating training process in the center.

Jordan Association of Pharmaceutical Products (JAPM)

JAPM involvement is through their presentation and chairing of the CoE steering committee responsible for the supervision and decision making in terms of curricula amendments and recruitment of centre staff. Also JAPM roles includes: identifying the sector training needs, marketing of the CoE services, providing raw materials for training/production process and providing of on-job training for the trainees as well as employment opportunities for the graduates.

> EU

Through their project in Jordan (Technical Assistance of the Programme in Support to the Employment and TVET Reforms), EU supported the pharmaceutical CoE through developing the curriculum with 10 training modules/text books, 5 years operational plan for the center and ToT for the technical staff.

ETVET Fund

The fund support included covering cost of the equipment and salaries for key technical staff of the CoE.

> Implemented training programmes

The training programme conducted in the center is titled "Operation Technician /Pharmaceutical production units" is one year programme of which 3 months are conducted in pharmaceuticals industries. The programme leads to the occupational level 3 (technician) according to the occupational skills levels in Jordan which consist of 5 levels. The training programme is opened for students who completed the second secondary class in the educational system in Jordan (12 years in the schools). It is opened for both males and females.

Annual intake of the institute is about (30) trainees and the employment percentage for the graduates according to the center principal is 90%. However, no tracer studies for the center graduates were conducted so far (interview with CoE principal).

Annex 2. Trainees logbook

Training institute/center:
Training programme title:
Programme duration:
Programme level:

Trainee's name:
Registration No.:
Programme's starting date:
Programme's completion date:
Training period:

Trainee's performance progress registration guide:

3 Received training 2 Performs under supervision 1 Performs on his/her own 2nd 3rd 4th 1st Trainer's name Follow up period From: From: From: From: To: To: To: To:

Checked by:	Name	Signature	Date
1 st coordinator			
2 nd coordinator			
Sector's director			

No	Training unit/Code	Required performance	Performance status		Scores		Trainer's signature	Training officer's	
	Tasks	level	3	2	1	Theory	Practical		signature
			0	_	-				0

Annex 2. Cont.

No.	Priority sector	Implementation year
1	Retail Sale of Automotive Fuel in Specialized Stores	2013
2	Engineering and Electrical Industry	2013
3	Maintenance and Repair of Motor Vehicles	2013
4	Electormechnical Installations	2014
5	Monetary Intermediation	2014
6	Hair Dressing	2014
7	Furniture	2014
8	Garments	2014
9	Agriculture	2014
10	Food, Beverages and Tobacco Industry	2015
11	Food, Beverages and Tobacco Trade	2015
12	Health	2015
13	Constructions	2018
14	Communications and Information Technology	2018
15	Tourism	2018

Annex 3. Survey studies conducted during the period (2013 – 2017)

Source: NCHRD/Al-Manar Project



United Nations Educational, Scientific and Cultural Organization **Beirut Office**

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